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Economic and Social Commission for Western Asia (ESCWA)

Report

Expert Group Meeting on the Potential of Manufacturing Renewable Energy Equipment in the Arab Region Kuwait City, 6 April 2016

Summary

The Economic and Social Commission of Western Asia (ESCWA) held an expert group meeting on the Potential of Manufacturing Renewable Energy Equipment in the Arab Region on 6 April 2016 in Kuwait City. Organized in cooperation with the International Renewable Energy Agency (IRENA), the meeting formed part of the agenda of the sixth Middle East and North Africa Renewable Energy Conference (MENAREC-6, Kuwait City, 4-6 April 2016). Participants from Arab countries and regional and international organizations discussed local manufacturing of renewable energy (RE) equipment and adaptation of RE technology to the context and needs of Arab countries, and provided comments on a draft study prepared by ESCWA on the subject, in cooperation with IRENA.

ESCWA, as a member of the MENAREC-6 International Steering Committee, was directly involved in the organization of the conference and has made substantive contributions to its various sessions. This report will present a summary of the expert group meeting discussions and will review other ESCWA contributions to MENAREC-6.

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Introduction

1. The integration of renewable energy (RE) into the energy mix has become a strategic goal for Arab countries. This is clearly reflected in the Pan-Arab Strategy for the Development of Renewable Energy Applications 2010-2030, which was adopted at the third Arab Economic and Social Development Summit (Riyadh, January 2013). The Pan-Arab Renewable Energy Strategy 2030: Roadmap of Actions for Implementation, devised by the League of Arab States and the International Renewable Energy Agency (IRENA), called for a major development of renewable resources for electricity generation by 2030, which requires significant investments in new RE power plants and transmission infrastructure.
2. The Economic and Social Commission for Western Asia (ESCWA) and IRENA organized an expert group meeting on the Potential of Manufacturing Renewable Energy Equipment in the Arab Region on 6 April 2016 in Kuwait City, as part of the sixth Middle East and North Africa Renewable Energy Conference (MENAREC-6). Participants discussed a draft study undertaken by ESCWA in cooperation with IRENA on the subject. The study is aimed at promoting local manufacturing and adaptation of RE technology to the context of the Arab region, as means to support the implementation of the Pan-Arab Strategy, create new jobs and reduce dependency on conventional energy sources. It will also assess the current situation of RE manufacturing in Arab countries, the potential for localizing RE technology and possibilities for regional cooperation and integration in that regard.
3. ESCWA, as a member of the MENAREC-6 International Steering Committee, was directly involved in the organization of the conference and has made substantive contributions to its various sessions. This report will present a summary of the expert group meeting discussions and an overview of other ESCWA contributions to MENAREC-6.

I. EXPERT GROUP MEETING

4. The expert group meeting on the Potential of Manufacturing Renewable Energy Equipment in the Arab Region was organized within MENAREC-6 and held on 6 April 2016, in Kuwait City. It was moderated by Ms. Radia Sedaoui, Chief of the Energy Section at the Social Development Policies Division at ESCWA. More than 50 participants from Arab countries and from regional and international organizations attended the meeting. The list of registered participants is presented in annex II.

A. TOPICS OF DISCUSSION

5. Mr. Pierre Al Khouri, Director General, Lebanese Center for Energy Conservation (LCEC), Lebanon, and ESCWA Consultant, and Ms. Sorina Mortada, LCEC Consultant, presented the ESCWA-IRENA draft study on the Potential of Manufacturing RE Equipment in the Arab Region. Case studies were undertaken to assess the status of RE in Jordan, Lebanon and the United Arab Emirates. The presentation also contained an overview of the value chain of most appropriate technologies, such as solar photovoltaic (PV), onshore wind power, concentrating solar power (CSP), for the Arab region. It provided recommendations based on the analysis of gaps.
6. Four panelists then contributed to the discussions:
 - (a) Mr. Adel Khalil, Director of the Master Programme on Renewable Energy and Energy Efficiency for the Middle East and North Africa Region (REMENA) at the Unikassel Versitat and Professor at Cairo University, made a presentation on the Development of an Egyptian Prototype CSP Thermal Test Loop, tackling the potential for local manufacturing of CSP, the CSP value chain, the breakdown of costs for CSP technologies and examples of cooperation between academia and the industry in the CSP field;

- (b) Mr. Hassan Abdalla El Fragabi, President of SOLARMAN CO, Sudan, underlined the experience of the country in assembling RE equipment and its considerable potential in the field. He also identified technology transfer as one of the main challenges that the Sudan faces in that domain;
- (c) Mr. Mohammed Dabbas, Advisor, Ministry of Energy and Mineral Resources, Jordan, and Member of the ESCWA Energy Committee, pointed to the shortages in energy supply that lead Jordan to increase the share of RE in its energy mix. He indicated that the use of RE could be increased through the installation of solar heaters and PV, the adoption of energy labels and of tax exemptions on RE components, and further cooperation between research and the industrial sectors. He said that Jordan could not manufacture all RE components but had an important experience in assembly, and that cooperation between Arab countries was essential for the development of RE technologies in the region;
- (d) Ms. Jennifer Decesaro, Senior Programme Officer, IRENA, United Arab Emirates, underlined the importance of regional and international cooperation in the RE field, referring to the joint ESCWA/IRENA study as a good example for such cooperation. She said that political support was key to expanding the use of RE technologies, highlighting the experience of the United States of America in developing RE potential through national integration, research and development, and engagement of the private sector.

7. In the ensuing discussion, participants highlighted the importance of the RE market size in RE manufacturing and localization in the Arab region. They underlined the regulations and state of cross-border trading between Arab countries as a problem for RE manufacturing and localization in the region. Cooperation between the public and private sectors should also be enhanced, and the appropriate environment should be created to support private sector investment in RE technologies. Institutional, regulation and financial mechanisms should be strengthened. Regional integration was key to overcome the challenges posed by the small size of national markets. The use of RE technologies should not be restricted to electricity generation. In their written evaluations, participants stressed the importance of dissemination of existing publications and surveys on RE manufacturing. They also requested that follow up actions be undertaken on the ESCWA-IRENA study, underlining that RE was key to achieving sustainable development in the Arab region, as also highlighted in the outcome document of MENAREC-6 (annex I).

B. MEETING EVALUATION

8. A meeting evaluation was carried out to assess relevance, effectiveness and impact. Twenty-eight participants responded to the evaluation questionnaire. The overall quality of the meeting was rated good to excellent by 89 per cent of them; 79 per cent thought that the meeting met its objectives to a satisfactory/great extent; and 71 per cent of respondents considered that the preparation of the meeting was good or excellent.

9. Respondents thought that the meeting has reached its objectives in terms of the relevance of participants and expertise on the subject. The exchange of information and experience among participants was deemed very useful. The meeting also provided an opportunity for them to establish new contacts and allowed them to raise comments on the ESCWA-IRENA study.

II. OTHER ESCWA CONTRIBUTIONS TO MENAREC-6

10. As a member of the International Steering Committee of MENAREC-6, ESCWA participated in the organization of the event and carried out several activities during the conference, other than the expert group meeting. Ms. Anhar Hegazi, Deputy Executive Secretary for Programme Support a.i, delivered one of the conference opening statements. She focused on the importance of energy in economic and social development, mentioning the importance of energy efficiency (EE) and RE in achieving the Sustainable Development Goals (SDGs), in particular SDG 7 on ensuring access to affordable, reliable, sustainable and

modern energy for all. She underlined the role of ESCWA in enhancing regional cooperation to promote good practices in the energy field, stressing the importance of unifying national, regional and international efforts to support the achievement of the SDGs in Arab countries.

A. ESCWA PARTICIPATION IN MENAREC-6 SESSIONS

11. Ms. Radia Sedaoui, Chief of the Energy Section of the Sustainable Development Policies Division (SDPD), gave the key presentation in a session on Socioeconomic and Environmental Benefits of Renewable Energy. She underlined those benefits, namely job creation and the improvement of living conditions in rural and remote areas. The speaker also reviewed the 2030 Agenda for Sustainable Development, focusing on Goal 7, and presented the three pillars of the United Nations Secretary-General's Initiative on Sustainable Energy for All. She gave recent data on the energy situation and greenhouse gas emissions in the Arab countries, comparing them with global levels. Priority areas to promote RE in the region included: (a) ensuring the stability of institutional and regulatory frameworks; (b) adopting adequate financing tools and measures; (c) expanding private sector involvement; (d) upgrading the grid infrastructure; and (e) encouraging innovation, technology transfer, knowledge sharing and capacity-building. The speaker finally underlined the fact that many countries in the region were not able to provide adequate energy services for a significant portion of their population.

12. Mr. Mongi Bida, First Economic Affairs Officer, SDPD, participated in two panels, one on Demand Management, Supply Diversification and Energy Efficiency, the other on Demand Side Management Strategies and Policy Measures: Uncertainties and Prospects. In the first panel, the speaker presented an overview of the role that EE and RE can play in responding to the growing energy needs in the Arab region, underlining the importance of EE to increase the share of RE in the domestic energy mix. Energy services, rather than energy commodities, should be the focus of energy markets. In the second panel, the speaker considered EE as the main instrument of demand side management, and underlined barriers to efficiency in the Arab region. Appropriate EE policy instruments should be put in place to remove those barriers. A list of priority actions in that regard was provided.

13. Mr. Salah Kandil, Economic Affairs Officer, SDPD, participated as a panelist in a session on Sustainable Envelop Buildings and Smart Cities Development. He gave a presentation that focused on definition and facts about smart, sustainable cities, and the importance of sustainable transport, EE and RE, which are at the heart of the Sustainable City Index. He underlined challenges in that regard, with a focus on the Arab region. Efforts were needed in terms of management, planning and financing to move forward on the issue of sustainable cities in Arab countries.

B. SIDE MEETINGS

14. ESCWA organized the following set of meetings with regional and international stakeholders in the context of MENAREC-6, to enhance regional cooperation and explore areas for possible cooperation within its 2016-2017 programme of work in the energy field.

1. *Meeting with IRENA*

15. The meeting discussed progress made and next steps for the joint study on the Potential of Local Manufacturing of RE Equipment in the Arab Region. Cooperation will be enhanced in the area of RE capacity-building.

2. *Meeting with MED-ENEC*

16. ESCWA also met with representatives of the Energy Efficiency in the Construction Sector in the Mediterranean (MED-ENEC) project. Joint studies could be undertaken on the role of super Energy Service Companies (ESCOs) in implementing EE programmes in the Arab region, and on using super ESCOs in

energy retrofitting of existing buildings in the region. The two entities also discussed the subject of the preparatory meeting to the twenty-second Conference of the Parties to the United Nations Framework Convention on Climate Change, to be held in Morocco in November 2016. MED-ENEC would lead the organization for that preparatory meeting, which would involve the participation of ESCWA, the League of Arab States and the Regional Center for Renewable Energy and Energy Efficiency (RECREE).

C. PARTICIPATION IN THE EXHIBITION

17. ESCWA participated in the international exhibition organized in the context of MENAREC-6, and distributed its documents on RE, EE, sustainable energy for all and climate change.

Annex I

Kuwait Declaration and Conference Outcome of the 6th Middle East & North Africa Renewable Energy Conference (MENAREC-6, Kuwait, 4-6 April 2016)

Ministers, heads of delegations and representatives of governments, national, regional and international organizations from the countries of the MENA region and partner countries participated in the 6th edition of MENAREC held in Kuwait April 4-6, 2016 on the principal theme “Renewable Innovations towards Sustainable Energy”;

Participants welcome the recommendations of various regional and international events held to facilitate cooperation on the transformation of energy sectors over the past decade, particularly the previous five editions of MENAREC: MENAREC 1 in Sanaa in 2004, MENAREC 2 in Amman in 2005, MENAREC 3 in Cairo in 2006, MENAREC 4 in Damascus in 2007 and MENAREC 5 in Marrakech in 2012;

Participants recalled the Paris Agreement and its recommendations to hold the increase in global average temperature to well below 2°C above pre-industrial levels and to rapidly cut emissions on a global scale to achieve this. Participants agreed upon the need to significantly decarbonise the energy sector through the accelerated deployment of renewable energy;

Participants recognised that doubling renewable energy in the global energy mix by 2030 can, as estimated by IRENA, boost global GDP by 1.1 percent, equating to USD 1.3 trillion of investment and generating more than 24 million jobs globally; and provide half the emission reductions needed to limit temperature rise to 2°C, while energy efficiency can provide the remainder;

Participants underline the high potential of renewable energy in the MENA region and the exploitation of this potential can contribute to a secure energy supply for meeting the strong growth in energy demand. Achieving renewable energy targets in the GCC alone (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the UAE) can, as estimated by IRENA, result in a cumulative reduction of 2.5 billion barrels of oil demand between 2015 and 2030 and 16 per cent in water withdrawals by 2030;

Acknowledging the progress made since the 5th edition of MENAREC and encourage further dialogue and cooperation within the MENA region in the field of renewable energy and energy efficiency, participants recommended in particular to:

- speed up the pace of diversification of energy resources, initiated in recent years by countries in the MENA region, in accelerating the deployment of renewable energy and energy efficiency, including industry, transport and buildings, and move towards sustainable built and smart cities;
- improve human and institutional capabilities and the implementation of coherent national and regional strategies, creating better enabling frameworks for small, medium and large renewable energy projects in the MENA region;
- further develop and strengthen enabling policy, regulatory and institutional frameworks, including energy pricing, to promote renewable energy and energy efficiency investments, while involving the private sector more effectively through mechanisms such as Public-Private Partnerships;

- accelerate the mobilization of private and public renewable energy financial resources; increasing the engagement of regional and international funds including the Arab funds and international financial institutions; to optimize their technical assistance to facilitate access to innovative funding mechanisms and risk mitigation facilities; and to encourage trilateral cooperation fostering successful funding models;
- strengthen grid infrastructure and technical, regulatory and market frameworks for cross-border electricity trade in the MENA region and to explore the possibility to export renewable energy beyond the region;
- build a structured industrial approach in the MENA region, including harmonized quality standards, that can contribute to the development of the renewable energy and energy efficiency sectors and provide new employment opportunities, while benefiting from synergies and scaling effects;
- encourage the governments of the MENA countries to actively involve all relevant stakeholders, including legislators, private sector, academia, local authorities, NGOs and civil society;
- increase the implementation of awareness-raising and education programs on renewable energy and energy efficiency by the countries of the MENA region, the regional and international organizations, the private sector, NGOs and media;
- strengthen the regional and international research, transfer of clean technologies, know-how and expertise to and between the countries of the MENA region; through improving networks and innovative cooperation involving local, regional and national stakeholders as well as technical and professional organizations.

Participants welcome the success of this conference and its positive results that offer promising prospects for strengthening cooperation in the MENA region in the field of renewable energy and energy efficiency;

Participants underline the importance of the upcoming 22nd session of the Conference of the Parties (COP 22) to the UNFCCC, to be hosted on November 7-18, 2016 by the Kingdom of Morocco, offering the MENA region an important chance to address the specific challenges and opportunities for the regional energy transition;

Participants agreed upon the need for continuous regional cooperation, creating further synergies with all relevant fora, such as the Arab Forum for Renewable Energy and Energy Efficiency (ARFREEE);

Participants express gratitude to the Government of Kuwait, KISR in particular, for the warm welcome, the good organization and smooth conduct of the conference, including its exhibition, and to IRENA, the League of Arab States, UNESCWA, RCREEE, the Government of Germany and other key partners for their support in organizing the conference. We welcome the proposal made by the Republic of Tunisia to host MENAREC 7 in 2018.

Kuwait City, April 6, 2016

Annex II*

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