



Economic and Social Commission for Western Asia (ESCWA)

Report

Awareness Day on “The Promotion of Renewable Energy Applications: Current State and Perspectives”

LTI Mahdia Beach Hotel, Mahdia, Tunisia 24 October 2019

Summary

The United Nations Economic and Social Commission for Western Asia (ESCWA), in partnership with the National Agency for Energy Conservation (ANME) in Tunisia, organized an Awareness Day in LTI Mahdia Beach Hotel, Mahdia, on 24 October 2019 titled “The Promotion of Renewable Energy Applications: Current State and Perspectives”. The main objective of the event was to inform and raise the awareness of local actors in the region of Mahdia about the national strategy and policy for promoting the use of renewable energy, the related institutional, regulatory, and incentive frameworks, and existing technologies on the market as well as the corresponding applications appropriate to the different sectors of economic activities.

The event allowed the deliberations on the challenges and opportunities of renewable energy development in Tunisia in general and in rural areas in particular with a focus on implementation within the current regulatory and incentive frameworks. Applications of small-scale renewable energy projects were also showcased for the benefit of rural areas including the agricultural sector with solar pumping technologies.

The event concluded with a series of recommendations that address easing the approval requirements for medium-voltage on-grid solar photovoltaic projects, streamlining the procedures for obtaining financial incentives, reinforcing quality control, and capacity building and education.

Contents

I.	Introduction	3
II.	RECOMMENDATIONS.....	3
III.	MAIN TOPICS OF DISCUSSIONS	3
A.	RENEWABLE ENERGY DEVELOPMENT IN tUNISIA: cHALLENGES, OPPORTUNITIES, AND PERSPECTIVES	4
B.	IMPLEMENTATION OF RENEWABLE ENERGY SYSTEMS: REGULATORY AND INCENTIVE frameworks and the role of the private sector.....	4
C.	RENEWABLE ENERGY APPLICATION IN RURAL AREAS: CHALLENGES AND OPPORTUNITIES	4
D.	Closing Session	5
IV.	ORGANIZATION OF WORK	5
A.	DATE AND VENUE	5
B.	OPENING.....	5
C.	PARTICIPANTS	5
D.	AGENDA	5
E.	EVALUATION	6
	ANNEX I: AGENDA.....	7
	ANNEX II: LIST OF PARTICIPANTS.....	9

I. Introduction

1. The United Nations Economic and Social Commission for Western Asia (ESCWA), in partnership with the National Agency for Energy Conservation (ANME) in Tunisia, organized an Awareness Day in LTI Mahdia Beach Hotel, Mahdia, on 24 October 2019 titled “The Promotion of Renewable Energy Applications: Current State and Perspectives”.
2. The main objective of the event was to inform and raise the awareness of local actors in the region of Mahdia about the national strategy and policy for promoting the use of renewable energy, the related institutional, regulatory, and incentive frameworks, and existing technologies on the market as well as the corresponding applications appropriate to the different sectors of economic activities.
3. The event was attended by more than 100 participants representing ministries, central, regional and local government entities, particularly governorates and municipalities, universities, energy and renewable energy experts, renewable energy companies, NGOs and citizens.
4. The event spanned over one day and consisted of three sessions. Section II of this report summarizes the event’s recommendations while Section III provides a summary of the presentations and the main topics of discussions held during each session. Section IV reviews the organization of the event, including information regarding the agenda, participants and a summary of the participants’ evaluation outcome. The full documentation of the event is available at the following address:

<https://www.unescwa.org/events/awareness-day-%E2%80%9C-promotion-renewable-energy-applications-current-state-and-perspectives%E2%80%9D>

II. RECOMMENDATIONS

5. The Awareness Day concluded with the following findings and recommendations:
 - a) Remove the minimum annual energy consumption threshold in kilowatt-hour adopted to approve on-grid low-voltage solar photovoltaic (PV) projects so that any interested entity connected to the low-voltage grid, regardless of its annual energy consumption, can invest in and benefit from its own solar PV system.
 - b) Streamline the procedure for approving on-grid medium-voltage solar PV projects, which includes reviewing and publishing the projects in the Official Journal of the Republic of Tunisia (JORT), so that the approval times can be reduced. The same applies for the grant applications and approval, as well as, payment procedures.
 - c) Revise and reduce the customs duties and taxes on imported renewable energy (RE) equipment to enable the upscaling of the RE sector and accelerate the country’s energy transition.
 - d) Subject RE equipment to the most rigorous and strict quality testing and control to guarantee the longevity of the installations and their best performance.
 - e) Reinforce the promotion of RE technologies and applications into the next regional development plan. This regional development plan should be developed using a participative and holistic approach based on gender equity and women empowerment.
 - f) Introduce RE topics and modules into the various educational and vocational training programs and levels, especially for women.

III. MAIN TOPICS OF DISCUSSIONS

6. Presentations and discussions are summarized in the following sections which are organized according to the substantive sessions of the event.

A. RENEWABLE ENERGY DEVELOPMENT IN TUNISIA: CHALLENGES, OPPORTUNITIES, AND PERSPECTIVES

7. A presentation by the National Agency for Energy Conservation (ANME) introduced the energy, particularly, renewable energy (RE) sector in Tunisia accompanied with data on operational programs and the national strategy until 2030 where Tunisia has set its target for the RE share in the electricity mix to 30%. The regulatory and incentive frameworks for low and medium voltage projects were also discussed along with their supportive funding instruments: The Energy Transition Fund and the Tunisian Fund for Investment. Finally, data on RE development in Mahdia was shared along with the financial feasibility of RE projects for agricultural applications.

8. The participants deliberated on the challenges and opportunities of RE development in Tunisia from the governmental and private sector perspectives. They agreed that future RE strategies and policies should reinforce the use of small-scale RE technologies and their applications not only in urban areas but in rural ones as well. The discussion was followed by a visit to the exhibition set up on the sidelines of the Awareness Day and where RE companies active in Mahdia and the surrounding governorates participated and showed their work and put have displayed RE equipment and applications.

B. IMPLEMENTATION OF RENEWABLE ENERGY SYSTEMS: REGULATORY AND INCENTIVE FRAMEWORKS AND THE ROLE OF THE PRIVATE SECTOR

9. A presentation by the Ministry of Industry and Small and Medium Enterprises presented the Tunisian energy context, the energy transition policy, the regulatory framework for RE, and the progress of the various energy programmes. Measures taken by the Tunisian government to achieve Tunisia's target of producing 30% of its electricity from RE sources by 2030 include the enforcement of the Tunisian Solar Plan which calls for the installation of 3,815 megawatts of solar energy capacity by 2030.

10. The ensuing discussions were centred around the following key messages and recommendations:

- a) The minimum annual energy consumption required for a household or an entity before an on-grid low-voltage solar photovoltaic (PV) project is approved represents a constraint for the development of the PV sector at a larger scale. Solar PV projects should instead be allowed for any interested entity regardless of its energy consumption.
- b) The procedure for approving on-grid medium-voltage solar PV projects by the national authority is too lengthy and this is due to the Technical Commission for Private Production of Electricity from Renewable Energy's long process of reviewing and publishing the projects in the Official Journal of the Republic of Tunisia (JORT), which considerably delays the start of the projects' implementation. The procedure should, therefore, be streamlined to minimize approval times. The same applies for the grant applications, as well as, approval procedures.
- c) The customs duties and taxes on imported RE equipment remain quite high which represents a barrier for the upscaling of the RE sector. They need to be revised and reduced to accelerate the country's energy transition.
- d) The quality of imported RE equipment must go through the most rigorous and strict testing and control to guarantee the longevity of the facilities and their best performance.

C. RENEWABLE ENERGY APPLICATION IN RURAL AREAS: CHALLENGES AND OPPORTUNITIES

11. A presentation by ESCWA on REGEND's assessment of prevailing situations in the rural areas of Tunisia started by going through Tunisia's rural indicators with a focus on energy, electricity, and agriculture. The drop in the cost of RE technologies, in general, and solar PV technologies, in particular, was highlighted while acknowledging that the cost remains high for farmers and the rural population. Hence, the various funding mechanisms and incentives available were presented including the procedural steps to access and benefit from them. Finally, the remaining constraints and challenges facing RE in Tunisia were discussed and these included the lack of a financial mechanism to fund small-scale RE systems in the agriculture sector and

the lack of consideration of small-scale RE technologies and applications by the existent regional development plan.

12. The participants deliberated at length about the various uses of RE in rural areas such as water pumping, milk cooling for collection and storage, water desalination, and electricity generation by farmers for agriculture uses. They emphasized the importance of having proper feasibility studies conducted and having qualified companies design and implement projects as per the industry's quality standards. From the gender perspective, the various initiatives being undertaken to improve the productive activities of rural women were discussed where the capacity-building center set up in Mahdia played a pivotal role in facilitating awareness-raising events which were of great help for women to build their skills and enabled them to participate in more bazaars to increase the sale of their products. The center remains constrained by its financial capacity to cater to all women beneficiaries with not enough equipment available for everyone.

13. The participants then agreed that RE development must become an integral part of the next regional development plan. They also recommended that a point of sale for women needs to be set up in Mahdia where all women can collectively sell their products. In addition, it was identified that a farmers' business school is needed in the region to educate farmers on how to elaborate business models and plans, and implement them. The addition of RE into the educational and vocational training programs in the region was also recommended.

D. CLOSING SESSION

14. The Awareness Day sessions were closed by Ms. Radia Sedaoui, Chief of the Energy Section, Climate Change and Natural Resources Sustainability (CCNRS) Cluster at ESCWA and Mr. Nafaa Baccari, Director in Charge of the Renewable Energy Division at ANME. The closing statements praised the exhibitions by the private sector and the knowledge and experience exchange achieved thanks to all the panellists. It was recommended that more work is needed to connect the private sector companies with potential clients, and ANME offered its support and assistance through its technical regional bureau in Sousse.

IV. ORGANIZATION OF WORK

A. DATE AND VENUE

15. The Awareness Day was held at the LTI Mahdia Beach Hotel, Mahida, Tunisia on 24 October 2019.

B. OPENING

16. The event was formally opened by Mr. Mohamed Lazhar Hseini, Secretary General of the Governorate of Mahdia; Mr. Riadh Berjeb, Director General of ANME; Mr. Faouzi Ghrab, Director General of the General Commission for Regional Development (CGDR); and Ms. Radia Sedaoui, Chief of the Energy Section, Sustainable Development Policies Division (SDPD), ESCWA.

C. PARTICIPANTS

17. The event was attended by 100 participants representing ministries, central, regional and local government entities, particularly governorates and municipalities, universities, energy and renewable energy experts, renewable energy companies, NGOs, and citizens. The list of participants is shown in Annex II.

D. AGENDA

18. Presentations and discussions were made over three sessions. The agenda of the event is summarized below:

- a) Opening Session and Introduction.
- b) Renewable Energy Development in Tunisia: Challenges, Opportunities, And Perspectives.

- c) Implementation of Renewable Energy Systems: Regulatory and Incentive Frameworks, and the Role of the Private Sector.
- d) Renewable Energy Application in Rural Areas: Challenges and Opportunities.
- e) Closing Statement.

E. EVALUATION

19. An evaluation questionnaire was distributed to the participants to assess the relevance, effectiveness, and impact of the event. The feedback received from 34 respondents was positive with 81% of the respondents confirming that the overall quality of the awareness day met their expectations and that the event achieved its objectives. 85% of the respondents stated that the sessions provided an important contribution and helped them improve basic knowledge on the topics covered and 92% thought that the time allocated for the awareness day and each session was appropriate. Suggestions were made to feature international success stories on the use of RE in the agricultural sector and to identify opportunities where municipalities can play a leading role in promoting small-scale RE technologies and applications. Another suggestion brought forward called for organizing similar events where numerous municipalities get represented, so that they can suggest ideas for projects based on their local needs which differ from area to area.

ANNEX I: AGENDA

NATIONS UNIES

F



Distr.
LIMITED
F/ESCWA/SDPD/2019/AGENDA
24 October 2019
ORIGINAL: FRENCH

Commission Economique et Sociale pour l'Asie Occidentale (CESAO)

Journée de sensibilisation sur « La Promotion des Applications d'Energies Renouvelables : Etat des Lieux et Perspectives »

Hôtel "LTI Mahdia Beach", Mahdia, Tunisie, 24 Octobre 2019.

AGENDA

Jeudi, 24 Octobre 2019	
08:30 - 09:00	Accueil et inscription des participants. <i>Les participants parrainés sont priés d'apporter leur passeport, leur cachet de visa d'entrée et leur talon de billet d'avion, avec eux à l'évènement.</i>
	Session d'ouverture
09:00 - 09:30	Mots d'ouverture : <ul style="list-style-type: none"> - M. Mohamed Lazhar Hseini, Secrétaire General du Gouvernorat de Mahdia. - M. Riadh Berjeb, Directeur Général de l'Agence Nationale pour la Maîtrise de l'Energie (ANME). - M. Faouzi Ghrab, Commissaire Général au Développement Régional (CGDR). - Mme. Radia Sedaoui, Chef de la Section Energie, Division des Politiques de Développement Durable, Commission Economique et Sociale des Nations Unies pour l'Aise Occidentale (ONU-CESAO / UN-ESCWA).
Session I	Développement des énergies renouvelables en Tunisie : Défis, opportunités et perspectives.
Modérateur :	Mme. Radia Sedaoui, ONU-CESAO.
Rapporteur :	Mme Salma Aouinti, ANME.
09:30 - 09:45	Présentation de cadrage. M. Nafaa Baccari, Chargé de la Direction des Energies Renouvelables, ANME.
09:45 - 10:15	Panélistes : <ul style="list-style-type: none"> - Mme. Amira Klibi, Ministère de l'Industrie, des PME (MIPME), - M. Abdelkader Baccouche, ANME, - M. Mohamed Abdelkader, UTICA - Mahdia, - M. Tahar Achour, Confédération des Entreprises Citoyennes de Tunisie (CONNECT).
10:15 - 10:45	Débat.
10:45 - 11:15	Pause-café et visite parallèle libre de l'exposition des systèmes et équipements d'énergies renouvelables.

Session II	Mise en œuvre des systèmes d'énergies renouvelables : Cadres réglementaire & incitatif et rôle du secteur privé.
Modérateur :	M. Mohamed Zied Gannar, Responsable d'Affaires Economiques, ONU-CESAO.
Rapporteur :	Mme. Hélène Ben Khemis, Chef de Service, Direction des Energies Renouvelables, ANME.
11:15 - 11:30	Présentation de cadrage. Mme. Amira Klibi, MIPME.
11:30 - 12:00	Panélistes : - Mme Salma Aouinti, ANME, - M. Imed Brahem STEG -District de Mahdia, - M. Ali Kanzari, Président de la Chambre Syndicale du Photovoltaïque (CSPV), - M. Ali Hamdi, Président du bureau CONECT - Mahdia, - Témoignage : « Utilisation du solaire PV ».
12:00 - 12:30	Débat.
Session III	Application des systèmes d'énergies renouvelables dans le milieu rural : Défis et opportunités.
Modérateur :	Mme. Kawther Kouki, Chef de Service, Agence de Promotion des Investissements Agricoles (APIA).
Rapporteur :	Mr. Jil Amine, Responsable de Développement Durable, ONU-CESAO.
12:30 - 12:45	Présentation de cadrage. M. Khaled Bedoui, Consultant ONU-CESAO.
12:45 - 13:15	Panélistes : - M. Mohamed Abdessalem, CGDR, - M. Borhène Mlayah, APIA - Mahdia, - M. Fethi Ksiksi, Commissariat Régional de Développement Agricole (CRDA - Mahdia), - M. Tahar Ben Ameer, Union Régionale de l'Agriculture et de la Pêche (URAP - Mahdia), - M. Fathi Hamad, ANME - Service Régional de Sousse, - Mme. Radhia Bel Haj Mohamed, Coordinatrice Locale de la Femme Rurale à Chorbane, - Témoignage : « PV dans la chaîne laitière »
13:15 - 13:45	Débat.
13:45 - 14:00	Conclusion et clôture de la journée : - M. Nafaa BACCARI, Chargé de la Direction des Energies Renouvelables, ANME. - Mme. Radia SEDAOU, Chef de la Section Energie, DPDD, ONU-CESAO.
14:00 - 15:00	Photo de groupe et déjeuner.

ANNEX II: LIST OF PARTICIPANTS

Governorate of Mahdia

Mr. Mohamed Lazhar Hseini

Secretary General of the Governorate of Mahdia

Commissariat Général au Développement Régional (CGDR)

Mr. Faouzi Ghrab

Director General

Mr. Mohamed Abdessalem

Central Director

Mr. Mahmoud Abdelmoulla

Director

Mr. Hassen Karrou

Central Director

Mr. Mohamed Ben Lazreg

Central Director

Agence Nationale pour la Maîtrise de l'Énergie (ANME)

Mr. Riadh Berjeb

General Director

Mr. Nafaa Baccari

In charge of the Renewable Energy Division

Ms. Helene Ben Khemis

Chief of Section

Renewable Energy Division

Mr. Abdelkader Baccouche

Prosol-Thermal in Commercial and Industry Sectors

Ms. Salma Aouinti

Renewable Energy Division

Mr. Fathi Hamad

ANME – Regional Bureau of Sousse

Ministry of Industry, Small and Medium Enterprises

Ms. Amira Klibi

In charge of Independent Power Production Division

Agence de Promotion des Investissements Agricoles (APIA)

Ms. Kaouther Kouki

Chief of Service

Mr. Borhene Mlayah

Commissariat Régional de Développement Agricole (CRDA)

Mr. Fethi Ksiksi

Ms. Radhia Haj Mohamed

Local Coordinator for Rural Women

Municipality of Chorbane

Ms. Moufida Naweli

Mayor

Chambre Syndicale du Photovoltaïque de Tunisie (CSPV)

Mr. Ali Kanzari

President

Union Tunisienne de l'Industrie, du Commerce et de l'Artisanat (UTICA)

Mr. Mohamed Abdelkader

UTICA-Mahdia

Confédération des Entreprises Citoyennes de Tunisie (CONECT)

Mr. Ali Hamdi

President

CONECT-Mahdia

Mr. Tahar Achour

Member, RE Expert

CONECT

Société Tunisienne de l'Electricité et du Gaz (STEG)

Mr. Imed Brahem

STEG-District Mahdia

Union Tunisienne de l'Agriculture et de la Pêche (UTAP)

Mr. Tahar Ben Ameer

UTAP-Mahdia

ESCWA Consultants

Mr. Khaled Bedoui

Mr. Hatem Mliki

Local Participants

Mr. Abed Achar

Mr. Jihad Besbes

Ms. Rihab Dardour

Ms. Widad Sabli

Mr. Abdessattar Hamda

Ms. Mounira Chaaban

Ms. Fairouz Chitaoui

Ms. Zouhour Ben Salem

Mr. Abdessalem Ben Amara

Mr. Mounir Ayari

Mr. Adel Ridaoui

Mr. Adel Kasem

Mr. Mohammad Ali Msakeni

Mr. Naim Ibrahim

Mr. Mohamed Kara

Mr. Mohamed Syoudou

Mr. Adel Ammar

Mr. Lotfi Abdalah

Ms. Ghada Jourat

Ms. Iman Jouha

Ms. Moufida Zad

Ms. Sonya Ben Abdallah

Mr. Mohamad Alkralhami

Mr. Imad Ibrahim

ESCWA Mailing Address:

United Nations Economic and Social Commission
for Western Asia (UN-ESCWA)

UN House

P.O. Box: 11-8575

Riad El-Solh 1107 2812

Beirut, Lebanon

Tel.: (+961-1) 981501/2

Fax: (+961-1) 981510

Ms. Radia Sedaoui

Chief Energy Section (ES)

Cluster 1 - Climate Change and Natural Resources

Sustainability (CCNRS) Cluster

Mr. Mohamed Zied Gannar

Economic Affairs Officer

ES, CCNRS Cluster

Mr. Jil Amine

Sustainable Development Officer

ES, CCNRS Cluster

Mr. Ahmad Diab

Research Assistant

ES, CCNRS Cluster

Ms. Maya Mansour

Research Assistant

ES, CCNRS Cluster