

المركز الإقليمي للطاقة المتجددة وكفاءة الطاقة

R C R E E E

Regional Center for Renewable Energy and Energy Efficiency



**ANNUAL ACTIVITY
REPORT 2011**



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List of abbreviations

AFD	Agence Française de Développement
AIDMO	Arabian Industrial Development and Mining Organization
ANME	Agence Nationale pour la Maitrise de l'Energie
APRUE	L'Agence Nationale pour la Promotion et la Rationalisation de l'Utilisation de l'Energie
BMZ	German Federal Ministry for Economic Cooperation and Development
BOT	Board of Trustees
DLR	German Aerospace Centre
EC	European Commission
EE	Energy Efficiency
EETC	Egyption Electricity Transmission Company
ESCOs	Energy Service Companies
EU	European Union
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IKI	International Climate Initiative
IRENA	International Renewable Energy Agency
JCEE	Egyptian-German Joint Committee on renewable energy and energy efficiency and environmental protection
CDM-JI	Clean Development Mechanism and Joint Implementation initiative
KfW	Kreditanstalt für Wiederaufbau
LAS	League of Arab States

LCEC	Lebanese Center for Energy Conservation
MEA	Middle East
MED-EMIP	Mediterranean Energy Market Integration Project
MED-ENEC	Energy Efficiency in the Construction Sector Project
MEDENER	Mediterranean Association of the national Agencies for Energy Conservation
MEDSTAT	Mediterranean Statistical Co-operation Programme
MENA	Middle East and North Africa
MoEE	Egyptian Ministry of Enery and Electricity
MoU	Memorandum of Understanding
MS	Member States
NEEAP	National Energy Efficiency Action Plan
NREA	New and Renewable Energy Authority
ONE	Office National de l'Electricité
RCREEE	Regional Centre for renewable Energy and Energy Efficiency
RE	Renewable Energy
REMENA	Master Program of Renewable Energy and Energy Efficiency for the Middle East and North Africa
RENAC	German Renewable Energy Academy
CDER	Centre de Developpement des Energies Renouvelables
SWHs	Solar Water Heaters
UN-ESCWA	United Nations Economic and Social Commission for Western

Executive Summary:

The activity report (the “Activities Report”) of the Regional Centre for Renewable Energies and Energy Efficiency (“RCREEE” or the “Centre”) summarizes the Centre's activities in the time period from 1st April 2011 to 31st January 2012. During this period RCREEE progressed to the level that it is independent and functional as leading regional policy think tank in RE&EE.

The highlights of the Centre's activities and achievements during that time period are the following:

- Two BOT meetings and six Executive Committee meetings were held in 2011 to follow up the legal, organizational, administrative and financial set up of the Centre.
- The center supported the policy making process in the member states by several activities tackled the most important issues in the region such as:
 1. The National Energy Efficiency Actions Plans
 2. Land use agreement models for RE projects
 3. RE pricing systems, the Feed in Tariff systems
 4. NAMA potential in RCREEE member states
 5. SWHs certification and standardization in RCREEE member states.
- RE&EE Data Base for the region will be established:
 1. “RCREEE has reviewed, edited and produced the renewable energy and energy efficiency guidebook for the Arab states that had been prepared by the League of Arab States, Electricity Arab Ministerial Council Secretary. This guidebook is the first published document that includes comprehensive information about policies and regulations, institutional frameworks, research and development, entities and companies specialized in RE&EE.
 2. Arab Renewable Energy and Energy Efficiency database web portal (AREED) is being launched and will be the first pool of information in the region. In addition, the center is working on the Arab Region Energy Balance (AREEB) web portal.

11 events organized by RCREEE and held in several member states countries discussing topics in RE & EE policy making. Three training courses in different fields of RE & EE conducted, these courses were attended by more than 60 trainees from all our member states.

RCREEE became highly recognized internationally and regionally. This is reflected in the section where cooperation established is showed.

RCREEE also started finance generating activities, joining consortiums and participating in tenders, using its technical capacities and strong relations with officials and experts.

The following gives a more detailed outline of the Centre's development and activities during the year 2011. It is divided into the sections, Legal & Administration (1.), a section dealing with the Centre's activities (2.) and the networking activities related to co-operation with international institutions (3.)

الملخص التنفيذي :

يلخص هذا التقرير أنشطة المركز الإقليمي للطاقة المتجددة وكفاءة الطاقة (RCREEE) خلال الفترة من ١ إبريل إلى ٣١ يناير ٢٠١٢، والتي تم خلالها الارتقاء إلى المستوى المطلوب من الاستقلالية والحالة الوظيفية التي تدعم موقع المركز الريادي كمنظمة إقليمية متخصصة في نشر سياسات الطاقة المتجددة وكفاءة الطاقة. ونستعرض فيما يلي ملخصاً لأهم ما تم إنجازه من أنشطة خلال تلك الفترة الزمنية:

- تم عقد اجتماعين لمجلس الأمناء وستة اجتماعات للجنة التنفيذية في عام ٢٠١١ لمتابعة الأمور القانونية والتنظيمية والإدارية والمالية للمركز.
- عمل المركز على دعم عملية صنع السياسات الخاصة بالطاقة المتجددة وكفاءة الطاقة في الدول الأعضاء من خلال العديد من الأنشطة المحورية التي تناولت أهم القضايا في المنطقة مثل:

◀ الخطط الوطنية لكفاءة الطاقة NEEAPs

◀ نماذج اتفاقيات شراء الطاقة واستخدام الأراضي لمشاريع الطاقة المتجددة

◀ نظم التسعير للكهرباء المنتجة من الطاقة المتجددة وخاصة نظام التعريف المميزة

◀ الإمكانيات المتاحة لبرامج الخطط الوطنية الملائمة للحد من انبعاثات ثاني أكسيد الكربون (NAMA)

◀ نظم الاعتمادية والتوحيد القياسي لأجهزة تسخين المياه بالطاقة الشمسية

● العمل على تأسيس قاعدة بيانات خاصة بالطاقة المتجددة وكفاءة الطاقة من خلال:

◀ القيام بمراجعة وإخراج وطباعة دليل إمكانات الدول العربية للطاقة المتجددة وكفاءة إنتاج واستهلاك الطاقة للدول العربية الذي أعدته الأمانة العامة للمجلس الوزاري العربي للكهرباء في جامعة الدول العربية. ويعتبر هذا الدليل هو الوثيقة الأولى من نوعها التي تتضمن معلومات شاملة عن السياسات واللوائح، والأطر المؤسسية والبحث والتطوير، والهيئات والشركات المتخصصة في الطاقة المتجددة وكفاءة الطاقة على مستوى المنطقة العربية.

◀ يتم العمل على إطلاق أول قاعدة بيانات إلكترونية للطاقة المتجددة وكفاءة الطاقة على المستوى العربي (AREED)، وبالإضافة إلى ذلك، فإن المركز يعمل على بناء بوابة إلكترونية خاصة بموازين الطاقة في المنطقة العربية (AREEB).

نظم المركز خلال عام ٢٠١١ أحد عشر حدثاً إقليمياً ومحلياً عقدت في عديد من الدول الأعضاء، وخصصت لمناقشة المواضيع المتعلقة بتطوير سياسات الطاقة المتجددة وكفاءة الطاقة، بالإضافة إلى ثلاث دورات تدريبية في مختلف مجالات الطاقة المتجددة وكفاءة الطاقة، حضرها أكثر من ٦٠ متدرباً من جميع الدول الأعضاء.

يشغل المركز الآن موقعاً متميزاً على المستوى الإقليمي والدولي وينعكس هذا من خلال قنوات التعاون والاتفاقيات والعقود المبرمة مع العديد من المنظمات والهيئات الإقليمية والدولية. كما بدأ المركز أيضاً بالقيام ببعض الأنشطة التي تحقق تساهم في استدامته وتحقق له العائد المادي، كمشاركته في التجمعات التي تقوم بتنفيذ المشاريع الإقليمية مستفيداً من القدرات التقنية المتاحة لديه والعلاقات المتينة مع المسؤولين والخبراء في المنطقة.

يعطي التقرير التالي لمحة أكثر تفصيلاً عن تطور المركز وأنشطته خلال العام ٢٠١١. وهو مقسم إلى ثلاثة أجزاء الأول يعنى بالشؤون القانونية والإدارية والثاني يعنى بالأنشطة الفنية المركز والجزء الثالث يركز على الأنشطة التي تهدف للترويج لأعمال المركز ومجالات التعاون مع المؤسسات الدولية والإقليمية والمحلية.

1. Legal & Administration:

In the course of 2011, following up on the steps taken towards the legal, administrative and financial set up of the Centre in 2010, many essential actions for the independence and sustainability of RCREEE were performed as follows:

1.1. Official Meetings

1.1.1. Board of Trustees:

The RCREEE Board of Trustees held two meetings last year; the first held in Tunisia on the 27th of April, where the BOT presidency moved from Jordan to Tunisia, and an extraordinary meeting held in Beirut on the 1st of October. The main decisions and achievements were:

1. The endorsement of the membership of Sudan, Bahrain and Iraq to RCREEE.
2. The assignment of RCREEE focal points.
3. The assignment of new Executive Committee public sector members.
4. The appointment of RCREEE financial Auditor.

1.1.2. Executive Committee:

In 2011, the executive committee met six times on January 13, April 27, June 26, September 10, October and December 6. Main discussions in these meetings were as follows:

- Work Plan 2011
- Approving of staff contracts
- the selection of RCREEE executive director
- Hiring correspondents

1.2. Administrative Activities

1.2.1. Establishment of RCREEE Accounting System

RCREEE established the Accounting Documentary Cycle and built the accounting system software for the center that assist in controlling the different accounts for different donors, in the case that all financial related operations are documented separately.

1.2.2. Staff Medical & Social Insurance

RCREEE selected and contracted the service provider in accordance with RCREEE regulations. RCREEE also finalized the staff Social Insurance in accordance with the Egyptian Laws and RCREEE regulations.

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1.2.3. Tax File Opening & External Financial Auditor

RCREEE opened the tax file in accordance with the Egyptian Laws. RCREEE, as well, contracted the External Auditor in accordance with RCREEE regulations.

1.2.4. Contracts with International Experts

RCREEE administration and financial department settled the international experts residency and work permission in Egypt. This will facilitate in the future all contracts with long term international employees.

1.2.5. Supporting Services

RCREEE administration and financial department completed all contracts which ensure that all needed services provided to RCREEE, such as the IT, Print Shop, Travel Agencies..etc.

1.3. Communication and Marketing

RCREEE has many tools for generating awareness and supporting its causes. Our main Communication and Marketing tool is RCREEE team. RCREEE promotes its activities through several tools on top of which is active presence in relevant regional and international forums to increase awareness of its future goals and targets (This topic is discussed in details under 3.Networking) Other promotion tools are:

1.3.1. RCREEE web Page

RCREEE web page (www.rcreee.org) has been renewed. For more electronic efficiency the new website has new hosting, fixable layout, modest shape and easier access to the information. All RCREEE's updated news and activities and accomplishments are regularly listed online. The web page is in the process of being translated to Arabic and French.

1.3.2. RCREEE News Letter

RCREEE continues to issue its newsletter on a regular basis. In 2011 four issues were published #6, #7, #8 and #9. Our newsletter is electronically distributed to ensure that it reaches all interested readers. Electronic dissemination presents a space for two way communication and feedback from our colleagues and partners in the field.

1.3.3. RCREEE Corporate design

RCREEE has now its own unique corporate design, all RCREEE publications, reports and newsletters are reflecting the spirit of RCREEE with a gray and dark red colorful design.

2. Activities

Year 2011 was a substantial, challenging and remarkable year for RCREEE. In spite of the huge obstacles faced, achieving the planned activities was a key objective for the team. The achievements were highly recognized at the regional and the international levels.

The detailed activities categorized according to RCREEE main pillars are described as follows:

2.1. Policy Development

2.1.1. Arabian Renewable Energy Strategy

- The coordination with LAS in terms of activating and marketing the Arabian Strategy for RE continued. RCREEE participated in the RE Strategy Group meeting and contributed actively in preparing the strategy action plan.
- In addition, a short paper about the private sector participation in RE large scale projects has been drafted by RCREEE and approved by the committee.

2.1.2. Arab End Use Electrical Energy Efficiency Guideline

- RCREEE continued coordination with MED-EMIP, MED-ENEC and LAS to support countries to draw a 3 year NEEAP, and succeeded to attract 10 countries to initiate a NEEAP namely Lebanon, Tunisia, Syria, Jordan, Palestine, Algeria, Sudan, Egypt, Bahrain and Libya. The progress was as follow:
 - ▶ Tunisia adapted the guideline and shaped their EE plan according to the template.
 - ▶ Lebanon approved the NEEAP by the prime ministry in November 2011.
 - ▶ Syria presented the draft NEEAP prepared in coordination with RCREEE to the higher council of EE early November. A committee was formed from all stakeholders to finalize the NEEAP to be presented to the prime ministry soon.
 - ▶ Palestine drafted their NEEAP with MED-ENEC support and discussed it at a national workshop early December; RCREEE received the draft NEEAP for reviewing. The NEEAP will be approved in early 2012
 - ▶ Sudan assigned a national expert to work with RCREEE to prepare the NEEAP draft, the draft is expected to be finalized in the first half of 2012.
 - ▶ Libya, during the Arab Electricity Ministerial Council meeting showed its interest in the NEEAP, communication with the Libyan side started. The focus will be to perform the draft NEEAP for Libya in 2012.
 - ▶ A meeting has been held with Dr. Khaled Toukan, Minister of Energy and Mineral Resources in Jordan, on 21/10/2012 to push the issue of NEEAP. Afterword the Ministry started the work to draft the first NEEAP that is expected to be presented in Feb, 2012.

- ▶ The Ministry of Electricity in Egypt started drafting the NEEAP for the electricity sector. A meeting was held with the stakeholders at the ministry on 19 November, 2011. The first draft NEEAP is expected to be finalized in the first quarter of 2012.
- ▶ Communication is initiated with Bahrain and Algeria to start the NEEAP process.
- To support synergizing the Egyptian energy efficiency efforts on the national level, RCREEE and MED-ENEC EU project in collaboration with the Egyptian Energy Efficiency Unit affiliated to the Egyptian Cabinet, as well as the League of Arab States and the JCEE organized a workshop titled "Invitation to a constructive dialogue on integrating of energy efficiency in the Egyptian economy". The event gathered high level experts and officials in various concerned sectors (industry, electricity, petroleum, environment, housing, tourism, local development and universities) together with experts from regional and international organizations (EU, World Bank, ESCWA, and UNDP).
- Back to back to the meeting of RCREEE Board of Trustees, a workshop to discuss the developments on the preparation of NEEAP in RCREEE Member States was held in Tunisia on 28 April, 2011. The workshop concluded a set of recommendations mainly focused on the possibility of member states to send their requests to LAS with regard to the technical requirements needed to develop the NEEAP, which works for both of RCREEE and MED-ENEC to secure the technical support required for the Member States within a specific timeframe to be agreed upon, and to consider the Arab EE guideline as an Arab initiative integrated and compatible with all national programs and activities.
- On November 21-22, 2011, a Regional Workshop "Implementation of the Arab EE Guideline: The General requirements and the EE targets and measures" convened in Khartoum in cooperation with the Sudanese Ministry of Electricity and Dams, followed by the meeting for EE workgroup of the RE&EE experts committee belongs to the Electricity Arab Ministerial Council. the workshop was intended for the benefit of the mandated national entities that had been named and assigned the responsibilities for the implementation of the Arab EE Guideline and the related (NEEAP) according to Article II of the Arab EE Guideline
- A first report about the progress of Arab EE Guideline implementation had been prepared and presented to executive bureau of the Arab Ministerial Council for Electricity in their meeting on 21 December, 2011.
- RCREEE created the Arab EE day website.

2.1.3. Energy Efficiency Indicators study

- RCREEE continues working on the study with the collaboration of PLAN Bleu.
- The objective of this project is to implement a set of indicators to be used for monitoring and assessing the energy efficiency policies in RCREEE Member States. In addition to the regional report, 10 national reports will be prepared and issued at the end of the study.
- Three group meeting workshops were held in 2011 to enhance the project. The last one was held on October 6th and 7th 2011, and organized in Plan Bleu premises in Sophia Antipolice to finalize the data collection, validate the first results and proceed to the preliminary benchmark between RCREEE countries.

2.1.4. CDM - JI Initiative project in MENA region

- The Regional Centre for Renewable Energies and Energy Efficiency (“RCREEE”) signed in March 2011 a Memorandum of Understanding with the CDM-JI Initiative MENA region.

The CDM/JI Initiative launched in June 2008 by the German Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) with the aim of promoting carbon market in the countries concerned by the initiative such as China, Brazil, India and the MENA region (Algeria, Egypt, Morocco and Tunisia) and helping German companies in meeting their emission reduction target the purchase of certified emission reduction (CERs). The MENA unit started operations in February 2009.

The co-operation under this Memorandum of Understanding should include the development and further improvement of framework conditions to facilitate the implementation of project activities under the CDM, in the MENA region covering the ten Member states of RCREEE.

On the margin of the Board of Trustees (BoT) meeting held on 27th of April 2011 in Tunis, RCREEE organized jointly with CDM-JI Initiative, a regional workshop on 29th of April 2011 dealing on new perspectives for carbon finance in RCREEE member States.

The workshop was attended by around 30 participants representing RCREEE BoT, the Designated National Authorities in RCREEE member states, the League of Arab States, the CDM-JI Initiatives and the National Agency for Energy Conservation in Tunisia. The objectives of the workshop were to:

- ▶ Raise awareness among RCREEE MS on the opportunities of carbon finance
 - ▶ Establish partnership between the different partners involved in RCREEE/CDM-JI
 - ▶ Discuss objectives of a study to be realized in MENA region regarding the existing opportunities and perspectives for carbon finance in RCREEE member states beyond 2012.
- On November 2011, RCREEE with the collaboration of CDM-JI Initiative for MENA region of the German Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) has achieved the study on CDM Potential and Perspectives for Carbon Finance in its Member States beyond 2012.
 - The objectives of the study are to speeding up the registration of the mature projects with the high potential of GHG mitigation before the end up of Kyoto protocol period and enhancing RCREEE member states in:
 - ▶ Developing mitigation strategies,
 - ▶ Identifying a NAMA portfolio,

- ▶ Supporting building capacity in the field of NAMAs,
- ▶ Mobilizing specific financing for climate change,
- ▶ Making the project developers familiar with the international negotiations and encouraging them to benefit from specific funds decided by Conferences of Copenhagen on 2009 and Cancun on 2010.

2.1.5. Market Demand Study of Sustainable Energy Investment potential in Egypt

- RCREEE is part of the consortium selected by EBRD bank to carry out the study titled “Market Demand Study of Sustainable Energy Investment potential in Egypt”. The consortium led by the British Consulting Firm ECA.
- RCREEE is contributing to several parts of the study including chapters dedicated to renewable energies and energy efficiency.

2.2. Research and Development

2.2.1. RCREEE Research Grant Projects

- In 2010, RCREEE has tendered the promotion of four research projects for the region and commissioned each with 40 thousand Euros (as of August 2010). Via the projects pertaining to the following topics:
- Developing a cost effective technology for solar water heating/storage for local production (Contract partner: ADEREE-Morocco),
 - ▶ Wind turbine blade cleaning (Contract partner: Mansoura University - Egypt),
 - ▶ A hybrid system: a solar concentrated linear Fresnel PV/thermal collector and 1 kW wind turbine for energy cogeneration (Contract partner: German University in Cairo-Egypt),
 - ▶ Building five photovoltaic stations -based on different technologies- for analyzing the usability under Jordanian framework conditions (NERC-Jordan)
- The projects are still running, and should be finalized late in 2012.

2.2.2. DLR Solar Atlas for MENA region

- RCREEE is part of the project consortium led by DLR. The project will bring high resolution (1km), long term coverage (at least 15 years) data on the available resources for the whole target region.
- The data base will be made available with a distributed information system which will ensure the ease of use of the data.

- The key roles of RCREEE in the project includes:
 - ▶ Identifying the relevant stakeholders in collaboration with other partners
 - ▶ Organization of a stakeholder workshop
 - ▶ Providing in collaboration with other partners the translation of the user interface of the system as well as public awareness material from English to French and Arabic
 - ▶ Assisting if needed; in data collection
 - ▶ Assisting in testing and validation,
 - ▶ Dissemination of the results to the region
- In fulfillment of its roles, RCREEE translated the project user questionnaire and circulated it to the project countries. RCREEE collected answers to the questionnaire and prepared a summary of the responses to reflect the region needs.
- The project partners agreed to organize the Users workshop early on November 1st 2011 just before the Desertec Conference in Cairo instead of the 2nd quarter of 2012. The workshop was successful. The event was attended by representatives of the member states, OME, EC delegation in Cairo and project experts from the German Aerospace Center, GeoModel Solar as well as TRANSVALOR participated in the event. The project experts provided an introduction to the Solar Atlas for the Mediterranean and a presentation of the prototype. Further, detailed information was presented on how to assess the solar potentials with geographical information systems and assessing solar radiation data for large scale solar energy projects in addition to the use of reference meteorological years for system design. All participants were invited to try the evolving prototype at www.solar-med-atlas.org.
- RCREEE was invited to share its experiences on the RE resource assessment topic within the new international initiative to establish “Global Solar and Wind Atlases” in the Clean Energy Ministerial Multilateral Working Group meeting on “Global Partnership's Technology Action Plans for Wind and Solar Energy Technologies”; Germany, November 22nd, 2011.

2.2.3. EE building code (eQUEST)

- The first progress report was submitted by the international consultancy firm WBT in December 2011.
- The main purpose of this report is to highlight the current status of the work carried out in the first phase including mainly the development and the test of simplified compliance software for building energy efficiency code. Under cooperation agreement with ANME (National Agency of Energy Conservation) this software will be used in Tunisia in the first step considered as a pilot phase and it will be extended to the other member states in further steps.

2.2.4. Arabian RE&EE Database (AREEED)

- RCREEE reviewed, edited and produced the renewable energy and energy efficiency Guidebook for the Arab states that had been prepared by the League of Arab States, Electricity Arab Ministerial Council Secretary.
 - ▶ A consultancy company was contracted to establish the web portal of the Arab RE&EE Database (AREED); it is expected to be fully functioning by April, 2012.
 - ▶ The web portal will include all the data mentioned in the Arab RE&EE Guidebook and it will be in 3 languages Arabic, English and French.
 - ▶ According to the decision of the Board of Trustees in its last meeting in Beirut on October 1, 2011, national focal points by the members of the Board of Trustees were assigned and will be mandated to update the data about AREED.

2.2.5. Arab Region Energy Balance web portal (AREEB)

- It is online energy balance (OEB), a tool for energy officials, scientists, experts and other stakeholders to enter and browse energy balance sheets for RCREEE member states. OEB gives the user the facility to edit and manipulate energy balances by updating existing data, completing missing data elements, or altering data to analyze according to the different scenarios the energy situation of RCREEE countries.
- Set of reports and indicators that would emphasize some technical and statistical aspects of fuels, utilization patterns, etc could be developed from the OEB such as:
 - ▶ Aggregate energy balance
 - ▶ Multiple datasets
 - ▶ Element energy profile
 - ▶ Compound indicators

2.2.6. Young Researchers Support, RCREEE Internship Activities

- RCREEE hosted a group of interns carrying out their Master Degree Researches for topics related to RCREEE member states in the field of energy efficiency and renewable energy as follows:
 - ▶ Student from Jordan on the topic “Methodology for the estimation of the optimal energy mix of PV and wind energy penetration in the German grid with its application in selected MENA regions in Egypt and Morocco for a 100% renewable energy scenario.”
 - ▶ Three Students from Germany on the topics:
 - “CSP as a chance for development?, a comparative empirical analysis of capacity elements in the planning of CSP projects contributing to the sustainable human development of less developed countries in North Africa and the Middle East“

- "Programming a Matlab simulation for a CSP plant including power block and cooling system".
- Scenarios for the solar Moroccan plan until 2020: a simulation-based, economic and technical aspects of integrating utility-scale photovoltaic and concentrated solar power plants into the Moroccan energy system"
- ▶ One student from Egypt on the topic "A Methodology for Deriving a Renewable Energy Market Competence Index with Application to CSP Technology". During this research, an analytical index was developed to quantitatively measure the attractiveness of CSP markets in RCREEE member states.

2.3. Private Investments and Public Private Partnerships (PPP)

2.3.1. Land Use Agreement and Power Purchase Agreement Models

- In order to enhance the tendering documents for large scale RE projects, and the involvement of the private sector in the region, RCREEE prepared models of the LAU and the PPA. These models will assist the user to draft an agreement focusing on the most important elements needed to be considered. Both agreements have been finalized and distributed to the member states for comments.
- For continuous interaction with member states, RCREEE held a regional workshop dialogue involving representatives from most of the Member States to discuss the draft models, and to consider the comments received.

2.3.2. Solar Water Heaters Certification and Standardization

- The Electricity Ministerial Council requested from RCREEE and AIDMO (Arabian Industrial Development and Mining Organization) to coordinate with council secretariat to work on standardization and certification system for SWHs aiming to achieve a quality certificate for the Arab region. This project, for which RCREEE finalizes the planning process for it in 2011, will produce a national and regional certification models for the Arab region. These models will be enhanced to be applied by the Arab countries.
- RCREEE received a request from the Ministry of Energy and Mineral Resources in Jordan to support it in designing a SWHs program similar to the Tunisian one (PROSOL). We agreed that Jordan will be the case study of the certification program.

2.3.3. Energy Efficiency Labels and Standards for Home Appliances

- On 26-27 December 2011, RCREEE, in cooperation with New & Renewable Energy Authority (NREA), organized a workshop on Energy Efficiency Labels and Standards for Home Appliances. The workshop was attended by specialists in EE Labeling for home appliances projects in RCREEE member states.
- National papers on EE labeling programs in member states were presented, which in turn will result in a comprehensive report on the evolution of labeling programs.

2.4. Capacity Development

Responding to the demand of the RCREEE Member States, RCREEE continued actively in the field of capacity development and training. RCREEE organized regular training events, to which participants from the member countries are invited upon the BoT's proposal, nomination respectively. Within the reporting period, three training events has been implemented and more than 60 participants has received technical training as follows:

2.4.1. Training Program on “RE pricing systems: Feed-In Tariff Design Options”

- RCREEE in cooperation with the Egyptian Electric Utility and Consumer Protection Regulatory Agency “EgyptERA” and the Egyptian Ministry of Electricity and Energy represented by the New & Renewable Energy Authority “NREA” organized a capacity building program about “RE pricing systems: Feed-In Tariff Design Options” held during the period October 23rd to 27th, 2011 in Cairo.
- Specialists from Morocco, Algeria, Tunisia, Libya, Sudan, Jordan, Palestine, Lebanon, Syria, Iraq and Bahrain participated in the program. The program presented to RCREEE member states the state-of-the art existing tools for implementing RE applications; through providing an overview of RE schemes all over the world, including FiT; it particularly focused on how FiT can be designed and how it is possible to simulate Fit Models for Wind Farms and Solar Plants; it presented what are the lessons to be taken into consideration while building successful legal and regulatory frameworks for FiT; finally, it offered hands-on training on practical case studies.
 - ▶ The program presented the following to RCREEE member states:
 - ▶ Practical documents and presentations on different supporting schemes including FiT system design options and associated administrative procedures needed to build consistent RE FiT policies and regulations back in their home country.
 - ▶ A computer based tool for investigating the effect of different design options that can be used to calculate FiT.
 - ▶ Capacity building on using the tool.

2.4.2. Training course on CDM "Carbon Trading"

- In the framework of the MoU signed on March 2011, aiming to improve the conditions needed to facilitate the implementation of project activities under the Clean Development Mechanism (CDM), and the National Appropriate Mitigation Actions (NAMAs) in the MENA region, RCREEE organized jointly with CDM-JI Initiative a training course on 16 November 2011 in Cairo on the opportunities of carbon finance beyond 2012. The objective is to build capacities as well as to raise awareness of the RE & EE experts and stakeholders in RCREEE member in order to enhance investments in RE and EE field.
- The training course was attended by participants from RCREEE member states, and representatives from the League of Arab States as well as MED-ENEC project.

2.4.3. Concentrating Solar Power and Grid-connected Solar PV Training Course

- RCREEE, the League of Arab States, the Euro-Arab Foundation for Higher Studies and the Advanced Technology Center of Renewable Energy organized a training course on "Concentrating Solar Power (CSP) and Grid-connected Solar PV" Granada, 16-25 May, 2011 . The objective of the training course was to help the participants to achieve a global and comprehensive knowledge in Concentrating Solar Power Plant and Grid-connected Solar PV.
- The course, which attended by 17 participants from 8 Arab countries, succeeded in showing the most important pros and cons of CSP and PV technologies and methodologies starting from the designing till the commissioning phase, which activated the discussions among the participants about many important issues such as the pricing, differences in technologies, regional challenges, barriers, trends and Markets.

3. Networking:

3.1. Cooperation with regional and international organizations:

RCREEE has worked closely with other regional and international organizations, tackling the following subjects:

3.1.1. Cooperation with the League of Arab States (LAS)

- In addition to the RE strategy and the Arab EE Guideline, RCREEE participated in the meetings of the Arab Ministerial Council for Electricity, held its ninth session at the General Secretariat of the League of Arab States in Cairo on December 22, 2011.
- The Secretary-General of the League of Arab States in his opening address, as well as Assistant Secretary-General for Economic Affairs, thanked RCREEE for his continued support to the activities of energy department in LAS and its contribution to the RE&EE potential of Arab countries handbook.
- The Council discussed many projects related to the Arab electrical interconnection and the exploitation of natural gas in electricity generation. The ministers focused on the importance of energy sources diversification for sustainable development in the region, and the need to enhance the use of RE&EE technologies.

3.1.2. Cooperation with the International Renewable Energy Agency's (IRENA):

- In July 2011, RCREEE participated in the International Renewable Energy Agency's (IRENA) High-Level Africa Consultative Forum on Renewable Energy in Abu Dhabi, United Arab Emirates. On the margin of the meeting, IRENA and RCREEE experts explored opportunities for cooperation and possibilities to build strategic relations contributing to a sustainable renewables future on the national, regional and international levels.
- IRENA and RCREEE Signed an MoU, where in mutual respect of each other's identity and mission, the parties commit themselves to cooperating on the basis of an exchange of relevant information, expertise and viewpoints in order to realize potential synergies, enhance public dialogue and thrive to implement common positions. Further, RCREEE was invited to the 2nd Session of the IRENA Assembly on January 14-15, 2012, where in the proposed Work Program of 2012 RCREEE was identified as a strategic partner to IRENA to implement a joint work plan based on the real needs of the countries in MENA region.
- It is anticipated that the MoU implementation will start in 2012 with two proposed projects including:
 - ▶ A short paper on “Perspectives of key players on Desertec and Mediterranean Solar Plan in North Africa”; presently under implementation
 - ▶ A study on “Evaluation of technological capability in manufacturing wind and solar equipment in targeted countries in MENA region”; which is in the planning process and possibly to be co-financed by IRENA, EIB and RCREEE.

3.1.3. Cooperation with the United Nation-Economic and social Commission for Western Asia “ESCWA”:

- On the margin of the Beirut Energy Forum RCREEE and ESCWA officials (Energy Division of the Sustainable Development and Productivity Department) where both parties agreed in principal to cooperate and exchange experiences in areas of mutual interests.
- It is agreed that a workshop on RE for rural electrification to be jointly organized in February 2012. The workshop will be designed as a training and skills development workshop on the means to scale up the use of renewable energy in rural areas, to achieve climate change mitigation and poverty alleviation in Western Asia. Within the workshop RCREEE will give a presentation and substantive materials on “Wind energy - technology, projects and prospects for development of rural areas”. In addition RCREEE will moderate a session on “Lessons that can be learned from renewable energy experiences in ESCWA member states”.

3.1.4. Cooperation with Secretariat of the Union for the Mediterranean (UFM):

- The Secretariat of the Union for the Mediterranean “UfMS” and the Regional Center for Renewable Energy and Energy Efficiency “RCREEE”, signed on November 2nd 2011 a memorandum of understanding where both parties expressed their willingness to enhance and intensify their collaboration in many areas including cooperation in developing the Master Plan of the flagship UfM initiative the Mediterranean Solar Plan “MSP”, particularly in the areas of policy and regulatory frameworks at national and regional levels.
- RCREEE will act as a regional partner of the UfMS for facilitating the implementation of the MSP in terms of policy development and advocacy work, awareness raising, agenda setting, and dissemination of initiatives and concepts. RCREEE will be also actively involved in further activities to implement the MSP. Further both UfMS and RCREEE will exchange experiences and cooperate in particular in areas such as investment promotion and public private partnerships (PPP); research, development and demonstration (RD&D); as well as capacity and network building. The foreseen activities under the MoU would also comprise organizing joint events, written materials, and sharing of experts among other activities.

3.2. Regional and International Conferences:

3.2.1. Beirut Energy Forum

- Beirut Energy Forum is the most important event in Lebanon for energy topics; it's the place to meet decision makers, leading experts, regional partners, and the international donor community in the energy efficiency, renewable energy, and green buildings sectors in Lebanon and the region. Therefore, RCREEE supported this forum. The main plenary session was RCREEE session where we presented our role in the region. At the same time, we had a booth at the exhibition of the conference where we have been introduced to many stakeholders at the regional and the international levels.

3.2.2. World Wind Energy Conference

- RCREEE was invited to participate in the 10th World Wind Energy Conference 2011, organized in Cairo from 31 October till 2 November 2011 by the World Wind Energy Association, the Egyptian Wind Energy Association and the German-Arabic Chamber of Commerce.
- In the session focusing on the MENA region, RCREEE presented a paper titled “Wind Energy in the Arabian Region: Bright Prospects for Green Growth” outlining that Arabian region countries possess significant potentials of world-class wind resources in many locations and demonstrating that wind energy is positioned towards becoming one of the mainstream energy resources. Further, RCREEE highlighted the plans already announced by many countries in the region and concludes that large wind farms capacities would exceed in total 18GW by 2020, with a possibility to further increase, provided that appropriate transparent and long term policy frameworks are enabled.

3.2.3. RCREEE Side event in the CoP17 of the UNFCCC “CDM and NAMA's, a vector for development? Examples from MENA Region”

- on December, 5th 2011 the Regional Center for Renewable Energy and Energy Efficiency organized with the cooperation of GERES a side event in the 17th Conference of the parties held in Durban (South Africa), Titled “CDM and NAMA's, a vector for development? Examples from the MENA region.
- During this event, RCREEE presented the outcomes of the study carried out in 2011 to identify support needs to speed up the registration of mature projects in its member states before the end up of Kyoto Protocol period and to enhance the capacities of its countries on the new mitigation supporting mechanisms.

3.3. External Events:

RCREEE reputation is being built to become the leading regional policy think tank in RE&EE and to be recognized as a leading centre of excellence on the international level. During 2011, RCREEE received several invitations to speak and participate in regional and international levels. In response to some of the invitations RCREEE was represented by its director, executive committee, experts and advisory unit in the following events:

- “Symposium on Solar Energy for Science”, Germany, May 2011.
- “Africa-EU Energy Partnership Stakeholders Planning Meeting”, June 2011.
- “Africa Carbon Forum 2011”, Morocco, July 2011.
- “IRENA /Africa High Level Consultative Meeting”, UAE, July, 2011.
- “Arab Forum for Regulators”, Egypt, June 2011.
- GIZ workshops on “Integration of renewable energies in national and regional energy matrixes: Advancement of curricula” Jordan, July 2011 and Tunisia, December, 2011.
- Experts workshop on “Climate Change in the Southern Mediterranean: The Water-Food-Energy-Migration Complex, Climate Security Dialogue Series”, Germany, May 2011.
- Joint event “the Green industries and their role in promoting economic and social development in Arab countries”, Lebanon, 28-30 September 2011.
- ESTEC 2011 - 5th European Solar Thermal Energy Conference, France, October 2011.
- 2nd German - Arab Energy Forum, Berlin, October 2011
- Clean Energy Ministerial Multilateral Working Group on “Implementing the Major Economies Forum Global Partnership's Technology Action Plans for Wind and Solar Energy Technologies”; Germany, November, 2011.
- “End Users Workshop on the Global Solar and Wind Atlas” , UAE; January 2012.
- “9th Workshop of the International Feed-In Cooperation (IFIC)”, Greece, January 2012.
- Workshop on the current situation and perspectives of the renewable energy sector in North Africa organized by UN-ECA on 12/13 January 2012 in Rabat Morocco.

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 RCREEE Interim Secretariat

المركز الإقليمي للطاقة المتجددة وكفاءة الطاقة

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