





## meetMED Workshop on Mapping EE and RES Market Potential Areas with Higher Impact on Local Economy and Job Creation

### Workshop report

## 12 November 2019 – Cairo, Egypt

On 12 November 2019, RCREEE hosted the meetMED workshop on "Mapping EE and RES Market Potential Areas with higher Impact on Local Economy and Job Creation", where the main results of the research regarding the EE and RES market potential, value chain, local manufacturing and job creation were illustrated in the presence of the most relevant stakeholders from the Southern and Eastern Mediterranean Countries (SEMCs).

The meetMED experts identified which sector is the most labour intensive and which parts of the value chain have higher potential to influence the local economy and job creation. Moreover, the event was an opportunity to highlight the potential of RE and EE in affecting the creation of local value at the regional level.

#### **Key messages**

The workshop was aimed at highlighting the country experiences in quantifying the jobs created and at identifying the most labour-intensive parts of the supply chain in each of the countries by gathering the most important stakeholders in the SEMCs working on the RE and EE fields with a special focus on the potential for job creation. The main outcomes of the discussion led to concluding that most of the jobs are created in the installation phase for most of the technologies, followed by the operation and maintenance phases. The discussion highlighted also the fact that the power sector is still mainly unexplored as regards the possibility to create more jobs, followed by the building sector, which is still considered as an untapped sector in almost all countries.

# Mapping EE and RES Market Potential Areas with Higher Impact on Local Economy and Job Creation

The workshop started by a presentation on the main meetMED activities, and on the methodology used to map the market potential: literature review to identify similar studies and gaps, followed by data collection, an identification of the stakeholders involved, and the presentation of the final report.

With respect to the regional context, it was highlighted that RE and EE have an impact on the Gross Domestic Production (GDP), the trade balance, the value chain and the creation of jobs. The presentation also shed the light on the key findings of the three countries examined in the report, i.e. Egypt, Tunisia and Lebanon.







#### **First session**

#### Employment effects of RE and EE in Egypt: A special focus on EE technologies

The first part focused on exploring the opportunities in the Egyptian energy sector, namely:

- Introduction about the energy sector in Egypt;
- RE and EE in the Egyptian energy strategies;
- Current status and plans of RE and EE in Egypt;
- Socio-Economic impacts of EE in Egypt;
- Recommendations and best practices to increase the employment rate in the RE and EE sectors in Egypt.

#### **RE and EE in Jordan**

The second part focused on the Jordan experience in RE and EE, namely:

- The legal framework for RE and EE in Jordan;
- The most important financing schemes of RE and EE, such as Jordan Renewable Energy and Energy Efficiency Fund (JREEEF);
- The Renewable Energy and Energy Efficiency Program (REIIITA).

#### Value Chain Assessment of Lebanon's RE and EE Markets in Lebanon

This final part was dedicated to RE and EE markets in Lebanon, namely:

- Achievements in RE and EE technologies and current status of RE and EE in Lebanon;
- The main economic drivers of solar PV;
- The impact on Local economy (Jobs and Supply Chain), scenarios overview and future development;
- Possible ways to increase the number of jobs created;
- Lessons learnt and key recommendations to increase the national employment rate.

#### Main discussion points in the first session

- Employment rates in some of the countries and their calculation methodology: The answer mainly depend on the methodologies used, which are usually the same as the one applied in the German and other international markets.
- The reasons behind the fact that employment figures are low in SEMCs: The difference in the level of industrialization of the SEMCs has been identified as the main reason for the low employment rate since there is no manufacturing in these countries compared to others, such as Canada and Australia.







#### **Second session**

#### Employment, qualification and economic effects of RE and EE in Tunisia

The first part focused on the Tunisian energy context, namely on:

- Focus on the effects of RE and EE in the creation of jobs.
- Current figures on the RE and EE plan in Tunisia;
- Peak and investment needs;
- The Tunisian strategy 30|30;
- The most important national energy and climate indicators;
- The social impacts of the European Commission policies in Tunisia;
- The main technologies and services for EE and RE.
- Methodology for calculation of the employment rate in Tunisia;
- Evolution of jobs created per EE programs and key findings;
- Different strategies based on the national needs and final conclusions.

#### Local economic development through RE projects in Algeria

The second part focused the local economic development in Algeria due to RE projects, namely:

- The Renewable Energy National Program by 2030: Key facts, consistency and objectives, advantages and key data for the program;
- The achievement of the pilot phase between 2011 to 2015;
- The capacity to be installed set in 2019.
- The main study results, which includes three possible scenarios for the RE sector in Algeria by 2030.
- Conclusions and recommendations deriving from the Algerian experience.

#### Main discussion points in the second session

Institutionalization: whether this should come prior to awareness or awareness should come prior to institutionalization  $\rightarrow$  The discussion was mainly centered on the PROSOL project, and why the solar water heaters have spread in Tunisia since 1980s, despite the absence of appropriately structured institutional and financial sectors. What endorsed the usage of renewable energy is the **increased price of electricity**. The strategy helped the citizens to get energy, including photovoltaic solar energy and solar water heaters energy.







#### Third session

#### International experience - The effect of energy efficiency on the job creation

- U4E, the Global Initiative led by UN Environment, funded by the Global Environment Facility and supported by leading companies and organisations, aims at transforming markets with energy-efficient lighting, appliances, and equipment.
- The Energy Efficiency opportunities have been identified by calculating how energy efficiency creates jobs whatever its Gross jobs, Net jobs, Direct jobs, Indirect jobs, Induced jobs or Labour intensity.
- Presentation of case studies from Morocco, Tunisia, France, Canada, India, USA and Australia.

#### Experience on calculating employment on the regional and international levels

- After 15 years researching on RE and EE at the regional and international level, the lessons learnt by *Gesellschaft für wirtschaftliche Strukturforschung* (GWS) show that RE and EE had directly and indirectly been fostering the creation of jobs.
- Full economic models can be easily adjusted, because they can use national data or international data, contain feedback loops, useful if monetary instruments are used, e.g. tax breaks, subsidies, feed in tariff. Also, they are useful if RE and EE are expected to have large economic feedbacks, such as freeing gas/oil for exports. They are also useful if fossil generation is crowded out.
- The regional model will show which are the effects of the larger markets as well as of the joint regional efforts and hubs.

#### **Conclusion and recommendations**

- The sustainability of RE and EE markets is necessary for the stability of permanent jobs and the transformation of intermittent jobs into permanent ones.
- It is necessary to establish a framework of quality assurance for installations and to support training and education along the value chain.
- In order to better integrate the components of the job creation into the different national policies, awareness raising campaigns to promote RE prosumers should be organised.
- The State should be engaged in the strategic planning for investors and in the development of competitive regulations at the local level.
- Several actions are still needed in order to identify the existing country capacity to accommodating the upcoming changes in the sector: in particular, the expected increase in the RE contribution to the energy mix, which will be needed to run new technologies, such as E-Mobility, large scale utility electricity and thermal storage, Internet of things and artificial intelligence.
- Any reliable evaluation and forecast of job opportunities, particularly those related to EE, would prior require a careful analysis of the supply chain for each possible EE system.
- In the long term, employment and industry development could be justified for public investments in the fields of RE with a high added value.







- Employment in RE and EE sectors is a common responsibility and its importance shall be highlighted in different sectors, i.e. policy, finance, vocational training, R&D, industrials, etc.
- The focus on PV creates fewer permanent jobs than wind energy, since permanent jobs are mainly created from technologies that require more Operations and Maintenance
- R&D, pilot projects and companies working on hybrid systems shall be promoted.
- Facilitate access to land for the Local industry development.
- Developing a regional tool that gives accurate numbers on direct and indirect jobs from renewables and energy efficiency is necessary.
- Support SMEs that offer renewable energy products or services to become more visible, nationally and internationally.
- Tax exemptions and low-interest loans shall be promoted for SMEs to be involved in existing initiatives (fairs, exhibitions, seminars, etc.) and professional associations in order to exploit synergies and integrate newly created SMEs.
- Invest in a better qualification of human resources in order to make them adapt to the requirements of the modern solar and wind industry.

#### For further information, please do not hesitate to contact:

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