







MAIA-TAQA Mobilizing new Areas of Investments And Together Aiming to Increase Quality of life for All NEWSLETTER ISSUE NT.3

The objective of the MAIA-TAQA project is to develop and to promote new innovative resource efficiency services through implementing pilot projects in 3 Mediterranean areas in Egypt, Jordan and Lebanon.

MISSION

MAIA-TAQA will:

Deal with RE services issues by setting up demonstrators in
 3 Mediterranean pilot countries - Lebanon, Egypt and Jordan - offering innovative services in:









Wastewater Treatment Building-Integrated Photovoltaics (BIPV) Solar Thermal Facility

Microg

- **Stimulate** innovative processes and develop solutions for each identified barrier: a capacity building programme (for lack of skills); an innovation desk (for lack of information); guidelines (for lack of regulation); vouchers (for lack of finance) and targeted B2B events (for lack of specific matchmaking).
- Promote innovative RE services in the MED countries through the facilitation of a welcoming environment based on EU-MED networks.

To know more: http://www.enicbcmed.eu/projects/maia-taga

INTERVIEW WITH AHMED EL WAKIL

President of the Alexandria Chamber of Commerce (Egypt) and President of ASCAME (Association of Mediterranean Chambers of Commerce and Industry)



First of all, we would like to thank the Alexandria Chamber of Commerce for hosting the MAIA-TAQA pilot project in Egypt at the Al-America whole sale market. Would you please explain to us where you see the benefits of the project for the Chamber?

The Alexandrian Chamber, thanks to an EU CBC previous project, was the first Chamber in the world to operate using solar energy. The aim was not just economic and environmental benefit, but was most importantly to demonstrate to our members the advantages of pilot implementation. This could ultimately help them remain competitive.

Now through El Ameria Wholesale Market MAIA-TAQA, which is in line with the national integrated sustainable energy strategy, we continue to demonstrate this strength through replicating within the thousands of SMEs dealing with the Market. The Chamber in this regard is conducting its role in leading innovation and supporting SMEs in innovative business.

During the preparation of the pilot project, do you have some lessons-learnt that you would like to share with us?

Though the chamber is a public law body, with strong connections to the government, and albeit communication with the relevant ministers and the Governor of Alexandria who provided full support, yet the procedures paperwork, and hence time between application till receiving the final Approval from Alexandria

Distribution company was an issue which the chamber is working on advocating through a position paper aiming at easing such a process for SMEs.

How do you see the replicability of the project?

This project is not only a Pilot for wholesale markets all over Egypt, it is also a pilot for the whole retail sector, which is a large consumer of daytime electricity. This will assist in increasing their competitiveness and profitability, contributing positively to the reduction of greenhouse gases and global warming. Such a project is now more feasible after the rationalization of the electricity subsidy and the modern feed-in tariff laws.

It is simply a bold step forwards in spreading renewable energy all over the productive and service sectors.

MAIA-TAQA PROJECT

Solar Thermal Energy Cooling System pilot project in Aqaba, Jordan



An agreement between Jordan Chamber of Commerce (JoCC) and MILLENNIUM ENERGY INDUSTRIES (MEI) was signed on the 28/6/2021 in order to implement the Aqaba project for Aqaba Chamber of Commerce, by installing Solar Thermal Energy Cooling System at their premises. The signing ceremony of this agreement was held at JoCC on 26/7/2021 in the presence of the Director of National Energy Research Center.

MEI visited the Aqaba Chamber of Commerce premises in order to inspect the site and start preparing the installation following the necessary procedures in cooperation with the Aqaba Chamber and authorities.

To know more about this tender

MAIA-TAQA PROJECT Wastewater Treatment Plant pilot project in Hadat, Lebanon



The Industrial Research Institute launched a request for proposal procedure for the construction of a Pilot Wastewater Treatment Plant on its premises at the Lebanese University Campus (Hadat), Lebanon.

Several companies showed interest and submitted their proposals. Discussions are ongoing with the shortlisted companies in order to select the best financial and technical offer. It is expected to start the pilot implementation by January 2022.

The Wastewater Treatment Plant is designed for the treatment of 20 cubic meters m3 of wastewater per day. It will be connected to a 25 kWp back up solar power source and the treated water will serve to irrigate the neighboring planted areas. The plant will include the following main components:

- Settlement tank and screening for solid separation
- Neutralization system
- DAF unit for oil and grease separation
- Advanced Moving Bed Biofilm Reactor technology (MBBR) for biological treatment

To know more about this tender

MAIA-TAQA PROJECT
PV Systems pilot project in El-Amreya, Egypt



In early November 2021 the last component for the Egyptian pilot project was delivered: the Battery systems that will contribute to produce 100 kWh and supply electricity to over 205 shops in El-Amreya Wholesale Fruits and Vegetable Market in Alexandria, Egypt.

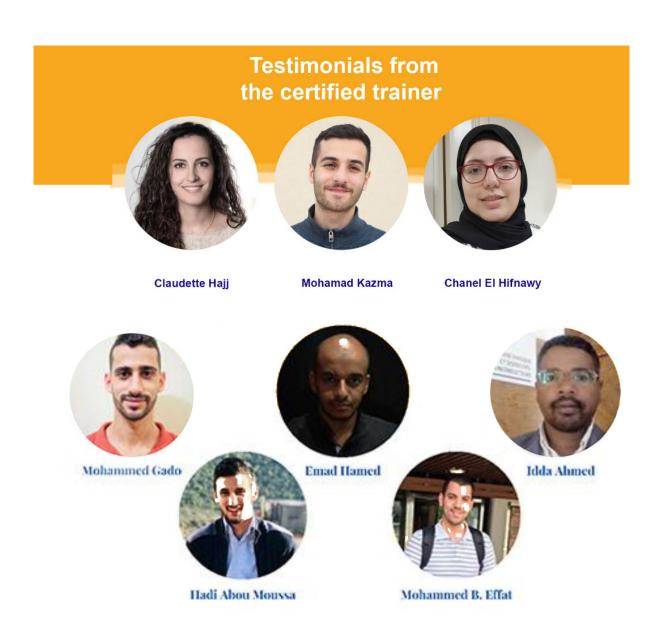
MAIA TAQA project partners, the Alexandria Chamber of Commerce, and the Confederation of Egyptian European Business Associations, represented by technical expert and consultant, Prof. Dr. Mohamed Elsobki, led a visit to the project's pilot area, in the presence of awarded EPC contractor, ONERA Systems, as well as the market management and technical staff.

On the 30th of March 2021, a contract was signed with the awarded company, ONERA Systems, for the tender to design, install, and commission the MAIA TAQA on-grid PV Solar plant of 100 kWp which includes a battery power system. The delivery was made on the 20th of June to the pilot area, El-Amreya Wholesale

Fruits and Vegetable Market in Alexandria, Egypt.

To know more

MAIA-TAQA PROJECT Training of Trainers Jordan, Lebanon and Egypt



Egypt, Jordan and Lebanon MAIA-TAQA Project partners conducted the 'Training of the Trainers' Program that was held online from March till June, 2021.

The pilot areas partners that tested Renewable Energy services, acted as real-life examples for the students, giving them the needed knowledge on field

implementation, innovative technologies, information on regulatory framework issues, finance and framework implementation.

- MAIA-TAQA Jordan training focused on Solar Cooling Technologies and Building Integrated Photovoltaic (BIPV) Systems. It was held online during September and October to interested SMEs in Jordanian market.
- MAIA-TAQA Lebanon training focused on wastewater and water treatment technologies held online from February to May 2021. The training topics covered the different available technologies from traditional to innovative in addition to legal and financial aspects and best practice case studies. Some examples of innovative waste water plant considered in the training:
- energy consumption and energy saving in wastewater treatment plant (WWTP)
- large urban WWTP;
- small scale WWTP;
- waste water treatment plant using natural system;
- sludge treatment plant with or without energy recovery.
- Waste water treatment for reuse in agriculture

Also, different advanced disinfection treatments (UV vs peracetic acid) for reuse in agriculture applied to large WWTP were presented.

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 MAIA-TAQA Egypt training focused on PV with batteries systems guiding SMEs to offer more innovative resource-efficient services, such as consulting, engineering and operations.

Some testimonials from the certified trainer in Lebanon and Egypt

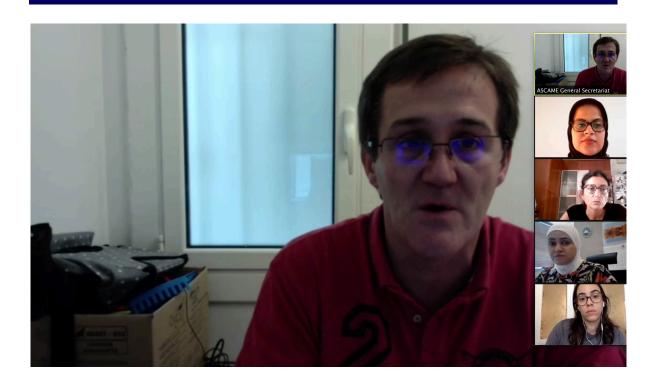
"The training helped us understand and overcome the barriers of developing innovative solutions required for solving the wastewater treatment shortage in

Lebanon." Mohamad Kazma

"I liked in the course its holistic coverage on the Photovoltaics-Battery systems that include technical and economic aspects. The practical aspect of sizing a Photovoltaic battery system was a topic I was very interested to learn about before I took the course. The examples provided in the course had a good level of detail and was carried out in a step-by-step fashion. This course added a value to me, and I am happy that I took it." – Mohammed B. Effat

To check other testimonials from the certified trainers in <u>Lebanon</u> and in <u>Egypt</u>

MAIA-TAQA PROJECT Marketing / Capitalization package



At present, **ASCAME** is progressing towards understanding the real needs of the three pilot partners and defining in common the key elements for starting the WP5 (Marketing / capitalization) implementation. Thus, **ASCAME** organized a first online meeting with the three pilot partners (IRI, JOCC and CEEBA) to introduce the awarded consulting company and get a first approach on the different needs of each field partner.

A questionnaire was prepared in order to get additional information from the three field partners on the type/ kind of structure envisaged for the Innovation One-stop-shop (IOSS) and the definition of the "Voucher Scheme" by every pilot country.

These Innovation One-stop-shop (IOSS) are called to have an essential role in project implementation because they will participate with local partners in many key activities such as the definition of the vouchers system, the launching of tenders (for the interested companies and the knowledge providers to assist the selected SMEs introduce the agreed innovation services), as well as the selection and management of beneficiary SMEs and knowledge providers. In addition, they will support and develop an overall innovation approach for enterprises.

PARTICIPATION IN CONFERENCES AND EVENTS

MAIA-TAQA PARTNER

Key sectoral event organization

November 17, Spain



The Mediterranean Green & Renewable Energy Summit (MedaWeek Barcelona 2021)

In the framework of the MedaWeek Barcelona 2021, ASCAME, partner in the MAIA-TAQA project of the ENI CBC MED programme, co-organized in collaboration with other key stakeholders the 9th Mediterranean Green & Renewable Energy Summit. This on-line summit, held on the 17th of November 2021, covered key sectors such as solar, wind, hydro, and the circular economy to build a more sustainable and resilient Mediterranean.

Because the Mediterranean is one of the regions most affected by climate change facing many risks, the need for sustainable growth becomes a must. With this aim the Mediterranean Green & Renewable Energy summit provided a clear insight into the development of the renewable energy market in the region and reputed speakers showed its latest trends. It also called for a clearer policy framework and guidelines for the development of renewable energy and the strengthening of

public-private collaboration.

It is in this context that ASCAME's participation in the MAIA-TAQA project, which aims to create new resources efficient services (RES) on solar energy in Egypt and Jordan and on water management and the reuse of water in Lebanon, becomes especially relevant. This active involvement reveals ASCAME's commitment to sustainable and inclusive growth and its daily work to achieve long-term development, in line with the sustainability Agenda 2030, through the cooperation of a united Mediterranean. This is precisely the cross border cooperation spirit underlying the MAIA-TAQA project.

To know more

MAIA-TAQA REPRESENTED IN Solar World Congress October 2021, Virtual



On 26th October, MAIA-TAQA project was represented in the virtual Solar World Congress 2021 organized by ISES, through the presentation of "Performance Simulation and Monitoring Methodology of a Solar Cooling Installation in Aqaba, Jordan".

This publication presented the results of the energy performance simulation of the solar cooling system that is currently under installation at the Aqaba Chamber of

Commerce building, as well as the monitoring methodology for the system's operation. The simulations estimated the solar field efficiency at 37.7% and the solar fraction at 52.3%. The conference proceedings are currently under preparation.

