

## Certified Training for Solar Photovoltaic Technicians at the Industrial Research Institute (IRI)



### **Background: FASEP-Vocational Training Initiative**

The French financing scheme FASEP-Formation Professionnelle managed by the General Directorate of the Treasury of the French Ministry of Economy and Finance co-funds the preparation of vocational training initiatives in the partner countries with particular emphasis being placed on sustainable development.

On 17 February 2014, the French Ministry of Economy and Finance approved the financing of a project entitled “Educational and Demonstration Platform for Renewable Energies in Lebanon” under the FASEP-Formation Professionnelle program.

The project was a joint initiative between the French company Transénergie and the Ministry of Energy and Water, represented by the Lebanese Center for Energy Conservation (LCEC), the United Nations Development Program in Lebanon (UNDP) and with the direct financial and logistical support of the Industrial Research Institute (IRI).

The project has established an educational platform on solar photovoltaic (PV) installation to be used by researchers, educational institutions, university students, as well as professionals in the solar photovoltaic sector. The platform is also allowing the IRI to test solar PV equipment and troubleshoot solar PV systems. It could also allow manufacturers and suppliers to present the different solar PV system technologies available in the market.

### Platform Components:

- ➔ A Solar PV system of 4.4 kWp is installed on the roof of the IRI as an extension of the existing 56 kWp+ 30kWp solar PV systems. The system is connected to an inverter located in the technical room and provides electricity for internal uses.
- ➔ A technical room that can accommodate a group of 10 to 12 trainees and equipped with 10 working stations.
- ➔ A solar street lighting system
- ➔ A hybrid solar system (solar PV + thermal)



The above components were provided within the project by a group of sponsors including 15 French companies and 8 Lebanese companies.



Please contact the IRI to display your components within the platform: [dir\\_td@iri.org.lb](mailto:dir_td@iri.org.lb)

### The Certified Training for Solar Photovoltaic Technicians

Starting 20 June 2022, the IRI will be providing regular certified trainings on solar PV installations for technicians. The training will include an overview on the following topics, with emphasis on safety considerations:

- ➔ Solar market in Lebanon, including legal and administrative requirements
- ➔ Welding basics
- ➔ Structure corrosion protection
- ➔ Structure fixation
- ➔ Solar components
- ➔ Solar applications



- ➔ Design, sizing and installation considerations
- ➔ Safety considerations for solar applications
- ➔ Acceptance testing (earth resistance, Voc, Isc, insulation, drop voltage, performance ratio..)
- ➔ Monitoring and control
- ➔ Maintenance
- ➔ Exam + certification
- ➔ The list of certified technicians to be made public by the IRI and shared on the LCEC website.

Duration of the training:

- ➔ Day 1: from 9 AM to 5 PM (with breaks)
- ➔ Day 2: from 9 AM to 1 PM (with breaks)
- ➔ Exam: in the afternoon on day 2

Contact persons at IRI:

- ➔ Eng. Mohamad Assaad Hajjar      Tel: 05 467 831-7      Ext 303
- ➔ Dr Fadi Melhem                      Tel : 05 467 831-7      Ext 415

Cost:

- ➔ 200 US\$ (Two Hundred US Dollars) which can be paid in Lebanese Pounds according to Sayrafa Rate

