

NREA offers two qualification certificates for working in the field of solar water heating.

For Firms, apply to get the solar thermal quality certificate which guarantees that your firm presents a high quality solar water heating systems considering the design, installation, and maintenance.

For Individuals, get a valuable training course then a certification to be a qualified Solar Water Heaters' installer and maintainer.

### **How to get the certification**

***The "Solar Thermal Qualified"*** is the national qualification scheme in Egypt for firms working in integrating and installing solar water heating systems. Firms that want to get the certification of qualification should

- 1- Apply to the Egyptian "New and Renewable Energy Authority" NREA through this page
- 2- Pay the fees
- 3- Upload the required documents
- 4- Representatives of the firm staff would have an exam in NREA
- 5- After passing the exam, the Firm would get the certification of qualification for working in integration and installation of solar water heating systems

### Certification requirement

The size and level of complexity of SWH projects variate depending on the sector of application. The SWH systems used in the residential sector are relatively small and compact (factory made systems), compared to the ones used in the commercial and the industrial sectors, that can be custom build and come in larger capacities. Therefore, firms should be certified in a manner that categorizes the system complexity in an ascending order, as shown in the Table

	<b>Sector which the firm can serve</b>	<b>System features</b>	<b>Comments</b>
<b>Category 1</b>	Only Residential	Compact	For low temperature applications (45- 60° C)  Small-scale installations suitable for the residential sector
<b>Category 2</b>	Commercial and residential	Compact or custom made	For medium temperature applications ( $\leq 80^{\circ}$ C)  Medium scale installations suitable for the commercial sector (hotels, hospitals, schools, malls, etc...)
<b>Category 3</b>	Residential, commercial and Industrial	Custom made	For high temperature applications ( $>100^{\circ}$ C)  Large scale installations suitable for the industrial sector. The systems are custom designed and manufactured.

The categorization criteria is the size and level of complexity of SWH projects.

In addition to the prequalification required of each category, firms have to meet various legal and administrative, Operational, and Managerial requirements. The firm has to submit the following documents to achieve the qualification.

Legal & Commercial and tax register

The CVs of current key employees including engineers, technicians and experts supported by a letter from the social insurance authority proving the subordination of the employees to the firm. At the time of qualification renewal, new hires (if any) have to comply to the same criteria.

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In case of changing the legal structure of the company (i.e. joint venture, spin-off, etc..) during the qualification validity time, the company in lead has to reapply for the qualification scheme with updated documents but does not have to repay the fees.

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Proof of tax register

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Key managers sign a commitment agreement

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Proof of hiring at least (commitment to work with qualified engineers and technicians)

1 Engineers+2 technicians → category 1

2 Engineers+4 technicians → category 2

3 Engineers+6 technicians+1 Health & Safety Officer → category 3

Each of the above should have at least 2 years experience

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When STQ starts the above has to have the relevant university and technical schools degrees. When the Solar thermal Engineers and technician schemes are launched the above have to be certified.

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List of products used (must be certified whenever applicable) and updated in renewal

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Track record of installation since establishment in the first time (system sizes and geographical distribution) and updates in renewal

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Operational

Organizational structure

Signed commitment agreement signing

Managerial

- Declaration to follow the codes and best practice guides

Declaration to propose recommended contractual agreement to the client

Declaration to offer clients after sales services

Declaration to respond to complains

Declaration to follow Qualification scheme requirements

Sample best practices which the firm commits to follow in the agreement

- After conducting a site walk-through, the firm shall present the client technical and financial offers that include bill of quantity, cost, payment terms and conditions, guarantee period any other relevant information.
- In case the client accepted the offer, both parties have to sign a contract for supply, installation and commissioning the solar water heating system, in which the responsibilities and rights of each party are defined.
- The firm shall hand over the system to the client in operation, in addition to operation and maintenance manuals, and relevant guarantees.
- The firm shall attach the safety instructions to the delivered equipment and inform the client about them as well.
- The firm shall present the client a tax invoice of the delivered equipment and services.
- Upon the client decision and acceptance, the firm and the client can sign a contract to maintain the system after the defects liability period (guarantee period). The conclusion of a maintenance contract is optional to the client.
- The firm has to promptly respond to client complains against technical failure or any other inquiries.

**Certification renewal**

To maintain the certification, the firm should submit the required data about their projects every 6 months

The certification should be renewed each 3 years