

# **SOLAR WATER HEATER (SWH)**

## **TRAINING PROGRAM**

**6<sup>TH</sup> DECEMBER TO 9<sup>TH</sup> DECEMBER 2010**

**VISION HALL, CMA COLONY LAHORE**



## **BACKGROUND**

To meet the requirement of skilled force in Renewable Energy Sector, the GTZ & REAP Executive Committee projected a training program for the Master Trainers, Sizing, Designing (Engineers Level) and Installation Supervisors, (for those having knowledge of Plumbing). REAP organized the SWH training program in major cities of the country and during the year 2010 three SWH training were planned, organized and managed in Islamabad, Karachi and Lahore.

Col. (R) Tariq Khattak, Acting President, REAP tackled the event very sincerely and competently. To make the event successful the Acting President, REAP appointed Mr. Faiz M. Bhutta as the Chief Organizer for Lahore Training Program and extended full support in all respect and the last REAP/gtz, SWH training of the year 2010 was launched from 6<sup>th</sup> Dec to 9<sup>th</sup> Dec 2010, at Vision Hall, CMA Colony Lahore Cant.

### **MASTER TRAINERS:**

The following Master Trainers participated and conducted the SWH training.

1. Mr. Faiz Muhammd Bhutta, Izhar Energy Services, Lahore
2. Mr. Muhammad Saeed, Solar Geysers (Pvt.) Ltd, Islamabad.
3. Mr. Naveed Ahmed, Sharif International, Chaklala Scheme, Rawalpindi



## **TRAINEES:**

The total number of trainees was 16, as per details given below:

<b>NAME</b>	<b>COMPANY</b>
<b>M. Jamil Akbar</b>	<b>Contrak (Pvt.) Ltd, Lahore</b>
<b>M. Razzaq Butt</b>	<b>Contrak (Pvt.) Ltd, Lahore</b>
<b>Fazal Mahmood</b>	<b>Contrak (Pvt.) Ltd, Lahore</b>
<b>Manzoor Ashraf</b>	<b>S.R.S. Lahore</b>
<b>M. Rizwan</b>	<b>S.R.S. Lahore</b>
<b>Asim Rasheed</b>	<b>Haroon Brothers, Lahore</b>
<b>S. M. Areeb Hussain</b>	<b>National Engineers, Lahore</b>
<b>M. Sajjad</b>	<b>Power Highway, Lahore</b>
<b>Sarfraz Ahmad</b>	<b>Solar Energy Asia, Lahore</b>
<b>Arshad Hayat</b>	<b>Pak Global Group, Bhalwal</b>
<b>Iqbal Hussain</b>	<b>TEVTA Lahore</b>
<b>Amanat Ali</b>	<b>TEVTA Secretariat, Lahore</b>
<b>Ejaz Ahmad Rana</b>	<b>SHV Energy Pakistan</b>
<b>Faisal Rahman</b>	<b>SHV Energy Pakistan</b>
<b>Sohail Majeed</b>	<b>Izhar Energy Services, Lahore</b>
<b>Khurram Rasheed</b>	<b>Izhar Energy Services, Lahore</b>



## **THEORITICAL TRAINING OF SIZING, DESIGNING:**

On 6<sup>th</sup> December 2010 all the participants reached to the Vision Hall, CMA Colony Lahore Cantt. for the training seminar on time and after the registration process of the trainees the session was begin at 10 a.m. Mr. Faiz started with introduction of the Master Trainers, and asked the trainees for introduction. After the introductory session the training manuals distributed amongst the trainees and proper session of the training was started. First session of the training was consisting of the theory of sizing & designing. All the three trainers explained one by one about the SWH basics and method of sizing and designing. The trainees were also requested to share their experiences as well, and freely ask questions, if there is anything particular they are looking for.



During the first two days theoretical training the trainees were taken to the roof for checking the venue for practical training and preparation of the bill of quantities. The trainees were shown the SWH unit available for installation, as well. The trainees thoroughly discussed the list of requirements on the roof, and the Master Trainers helped them in finalizing the requisite list. The trainees openly discussed the issues and their observations after the theory sessions and raised questions about the pre arrangements of the SWH, which were replied by the Master Trainers very proficiently until they got satisfied.



## PRACTICAL TRAINING OF INSTATLLATION SUPERVISORS:

After two days theoretical training the practical training was started On 8<sup>th</sup> December 2010, all the trainees took part in the installation activities.



## TEST & FEED BACK OF THE TRAINEES

Following the practical training the trainees participated in the Test and Feedback activities. All the trainees remained successful, in the test and they revealed their full satisfaction through their feedback forms.

## CLOSING CEREMONY

After the successful theoretical and practical training sessions, the Closing ceremony was held at the Vision Hall, 9th December 2010, at 3:30 p.m., for awarding certificates to the trainees. Mr. *Asif Waseem, General Manager, TEVTA Secretariat, Lahore* participated as Chief Guest.

Mr. Faiz M. Bhutta, presented his welcome speech and thanked GTZ, & AEDB, for their support and the participants for making the event successful. He explained the background of REAP & GTZ. He explained the future plan of further trainings on SWH and also on Photovoltaic (PV) panels, in the near future. He stated that these training will play a key role in developing industry of Renewable Energy and leading the nation to a more prosperous and stable path.



On the Occasion, Mr. *Asif Waseem*, the Chief Guest, addressed the participants and expressed his complete satisfaction over the event and offered his sincere assistance required to REAP, in the development of this new technology.



The Chief Guest highlighted the importance of such trainings, and most significant feature of awareness of the people about the alternative technology. The Chief Guest invited REAP to come forward and join hands with TEVTA to promote the RE technology.



At the last part of the ceremony certificates the Chief Guest distributed certificates amongst the Training participants.



Hi-Tea was served at the end of the ceremony and a group photo of the Trainees with the Chief Guest, GTZ and REAP Officials was made.



***Prepared By:***  
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