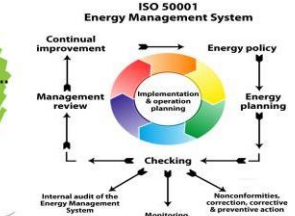
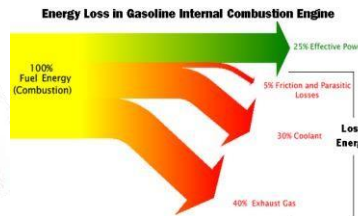


# Training Workshop on Energy Efficiency & Auditing

Pakistan Hosiery Manufacturers & Exporters Association – **PHMA** in collaboration with **Bfz gGmbH Germany** and **SMEDA Government of Pakistan** are organizing two days training workshop on Energy Efficiency & Auditing + two days Audit/follow-up. The workshop has been designed based on the current energy crises faced by the Pakistani industries and its main objective is to equip the industrial professionals with the latest techniques and knowledge to resolve their problems so that the industry may work economically more efficient and ecologically sustainable by application & practicing of sustainable improvement techniques.



## Contents of Theoretical Session (2 days)

## Detail of Practical Session / Audit (2 days)

**Energy Management System**

- ✓ Concept of Energy EnMS Energy Audit (EA)
- ✓ How to determine scope & use EA instrumentation and Energy information System Software (EIS)

**Energy Saving Opportunities in Electrical Systems**

- ✓ Cover Electrical, power generation, electrical power distribution, P.F.

- ✓ Load management, capacitors, harmonics, motors, VFD's and compressors

**Energy Saving Opportunities in Thermal Systems**

- ✓ Steam Generation, distribution
- ✓ Combustion Efficiency
- ✓ Waste heat recovery boilers, Economizers, & Condensates return system.
- ✓ Thermal distribution system

**Energy Audit of participants' company**

Consultant will perform one day audit of thermal & electrical utilities of participant's company & give recommendations for the potential Energy saving opportunities. Briefing on EA equipment (to check Motor loading Efficiency, water testing, Air leak test, boiler testing & Power factor test) will also share with participant during audit.

**Follow-up visit by ESPIRE Lead Auditor team**

ESPIRE team will perform one day follow-up visit at company to check the implementation and outcome of Consultant's suggestions after 30 working days of Energy Audit. Each participating company has to prepare a report which will be reviewed in follow-up visit by ESPIRE team.

### Designed For:

Electrical / Mechanical / Utility Managers and staff, Industrialists, Engineers and Energy Practitioners

### Methodology:

Lectures, Case Studies / practical examples, Audit of participant's company, Evaluation and follow-up

### Dates: Dec 17&18, 2013

Date for company audit will be decided with consensus of participants

### Time: 0900 hrs – 1730 hrs

**Venue: PHMA House, 37-H Block -6 PECHS, Karachi**

### Resource Persons:

NEC- Consultants (Pvt) Ltd. Is one of the largest environmental and energy consulting Companies in Pakistan. NEC has successfully delivered number of long term and short term projects in of Pakistan. The key resource persons for the session **Obaid Mirza** is a Mechanical Engineer from NED and has worked in oil and Textile sector in the field of Energy Conservation his area of specialization is Steam and Power Generation and Gas Utilities. **Abid Hussain** is electrical engineer from NED University and has vast experience in Energy Audits of different industrial organizations. His area of expertise is electrical energy and utilities.

**Fee:** PKR 11,500/per participant will be paid in advance by cash or cheque on the name of "PHMA". Cost include training material, Lunch & tea

**Certificate:** After completion of successful training sessions, each participant will be entitled of "Certificate of Energy Practitioner" which will be issued to only those participants who implement Energy Efficiency Measures in their **respective** organizations and submit the report/results to PHMA/SMEDA/Bfz within 1.5 month after Audit.

**Mr. Imtiaz Ahmed / Mr. M. Naveed**

0300-2211473 / 0334-3692359

Pakistan Hosiery Manufacturer and Exporters Association, PHMA House, 37-H, Block-6, PECHS, Karachi. Fax: 0213-4543774  
Email: [bfzcoord@phmaonline.com](mailto:bfzcoord@phmaonline.com),  
[accounts@phmaonline.com](mailto:accounts@phmaonline.com)

**Seats are limited**

**For registration, please Contact following persons**

**M. Naem Ansari**

SMEDA - Karachi

5<sup>th</sup> Floor Bahria Complex II, M.T. Khan Road, Karachi, Sindh

Tel.: 021-111-111-456, Fax: 0213- 5610 572

Email: [smedagency@gmail.com](mailto:smedagency@gmail.com)

[www.smeda.org.pk](http://www.smeda.org.pk)