IMPROVING ENERGY EFFICIENCY IN INDUSTRY (IEEI) PROJECT IN TURKEY

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Azerbaijan – Baku
THE OVERALL AIM OF THE PROJECT

The objective: Improving the overall energy efficiency of Turkish Industry.

In this context;

- Extending the popularity of energy efficient technologies and energy saving precautions through Industrial firms
- Providing an effective management in terms of energy usage via various incentives are aimed.
EnMS User Level Trainings: More than 400 participants in different provinces of Turkey.

EnMS Expert Level Trainings

Invitation Letters to 140 firms

3 groups in 3 different provinces – 3 modules for each group (9 months)

Online meetings (Webinars)

September 2015 – September 2016: 9 trainings, 24 webinars

Basecamp: Online file sharing platform

Training of Trainers: 55 participants in Ankara & İstanbul
1) Implementation of Energy Management System (EnMS)

Achievements and Gains of EnMS

Sector Based Company Distribution

- Other (furniture, etc.): 2
- Machinery (automotive, automotive spare parts, electromechanics): 4
- Textile: 8
- Chemicals (including petro-chemical): 5
- Fabricated metal products (white goods, cable, wires, combi,): 6
- Iron–steel & non-ferrous metals (including casting, rolling ball, metal forming, copper): 4
- Industry based on stone and soil except cement (glass, ceramics, plaster): 3
- Cement: 3
1) Implementation of Energy Management System (EnMS)

Achievements and Gains of EnMS

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<tbody>
<tr>
<td>Ankara Group</td>
<td>1,026</td>
<td>2,975,332</td>
<td>4,025,046</td>
<td>2,254</td>
<td>3,729,444</td>
<td>11,108,678</td>
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<td>Istanbul Group</td>
<td>18,434</td>
<td>20,934,421</td>
<td>82,700,560</td>
<td>1,911</td>
<td>8,012,590</td>
<td>15,629,555</td>
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The calculations for İzmir Group companies are currently being undertaken.

The new program has already been initiated with 30 plants and 32 consultants.
2) Developing Energy Management Units in Organized Industrial Zones (OIZs)

- **September 2014**: Evaluation of OIZs based on some criteria
- **October 2014**: Selection of 9 OIZs with project partners
- **November–December 2014**: On site visits to selected 9 OIZs
- **January 2015**: Elimination of 3 OIZs
- **February 2015**: Sending letters to 6 OIZs and signing contracts in order to create a common program
- **March 2015**: Collecting commitment letters from OIZs
- **April 2015**: Conducting an international tender in order to purchase measurement instruments
- **July 2015**: Evaluation of tenders and declaration of winner
- **August 2015**: Demanding calibration documents from the winner
- **October 2015**: Handing over the instruments by the winner firm
- **November 2015**: Taking over the instruments over from customs
- **December 2015**: Convience control of the instruments and approval of calibration documents
- **March 2016**: 3 days of theoretical and practical trainings on how to use instruments
2) Developing Energy Management Units in Organized Industrial Zones (OIZs)

Measurements instruments: 1) infrared thermal camera, 2) infrared thermometer, 3) ultrasonic flow meter, 4) energy analyzer, 5) multifunctional HVAC 6) flue gas analyzer 7) ultrasonic leak detector 8) tachometer, 9) water conductivity meter

Selection of new 6 OIZs: Application deadline is over. Assessment continues.

New training design:
- Energy Data Gathering, Analyzing and Reporting
- Introduction to Energy Savings Measurement and Verification
- Financial Evaluation of Energy Efficiency Projects
3) Other Activities

Baseline study: Projection method used for the first time in Turkey

- ESCO Gap Analysis: Eliminating and determining all obstacles that prevent EVD (Energy Efficiency Consultancy) firms turn into real ESCOs (energy service companies)

- New portal development study

- Benchmarking study – Cooperation with Austrian Energy Agency
3) Other Activities

Developing walk through and detailed energy audit guides

Exercising the guide with a workshop by the participation of ESCOs

Conducting walk through and detailed energy audits in reputable factories of Turkey in the scope of pilot study

The first guide which is released after a long period of time

Developing energy audit methodology: Ongoing in 7 sectors
3) Other Activities

Translation of 2270 pages technical material into Turkish: 1) Fan 2) Pump 3) Compressed Air 4) Steam

Printed books

Nine short films about how the training units in General Directorate of Renewable Energy facility operate:

- Open Burner / Lighting / Compressed Air / Furnace /
- Steam Traps / Fan / Boiler / Pump / Cooling

Financial mechanism study:

- A study on the analysis of the situation of Turkey
- Report on the improvement and enhancement of YEGM mechanisms
- Designing a new mechanism for KOSGEB
- Designing a new mechanism for TTGV
- Developing an integrated mechanism for Turkish government
- Workshop related to the integrated mechanism
- Mexico study visit and developing proposals for Turkey government
THANK YOU FOR YOUR ATTENTION

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