

Industrial Energy Efficiency Project

Islamic Republic of Iran

Sarooj Cement Company (SCC) has joined hands with the United Nations Industrial Development Organization (UNIDO) and Iranian Fuel Conservation Company (IFCO) to implement a structured approach to energy management in their operations, under the Global Environment Facility (GEF) funded project, "Industrial Energy Efficiency in Key Sectors".

Through this cooperation, the SCC has already planned significant savings through the implementation of an Energy Management System (EnMS) in alignment with ISO 50001:2011.

A Case Study of Sarooj Cement Company

EnMS background in SCC

Before starting UNIDO project, SCC manager already decided to obtain ISO 50001 certification. However, they stopped the process and joined to UNIDO project to get prepared for energy management system.

The mentality about energy efficiency was purchasing new efficient technologies and technical modifications requiring at least a little investment. Training by UNIDO consultant could end up with a complete monitoring the process and keeping eyes on meaningful deviations.

After implementation of EnMS based on UNIDO's approach, more benefits have been obtained in terms of valuable tools and trainings.



Sarooj cement plant (SCC) is located 90 Km northwest of Isfahan city and has been working now for 10 years in manufacturing of Portland grey cement type 1-325 and 1-425. The capacity is namely 2400 ton per day and the total staff working in the factory are 240 including official employees and the contractors.

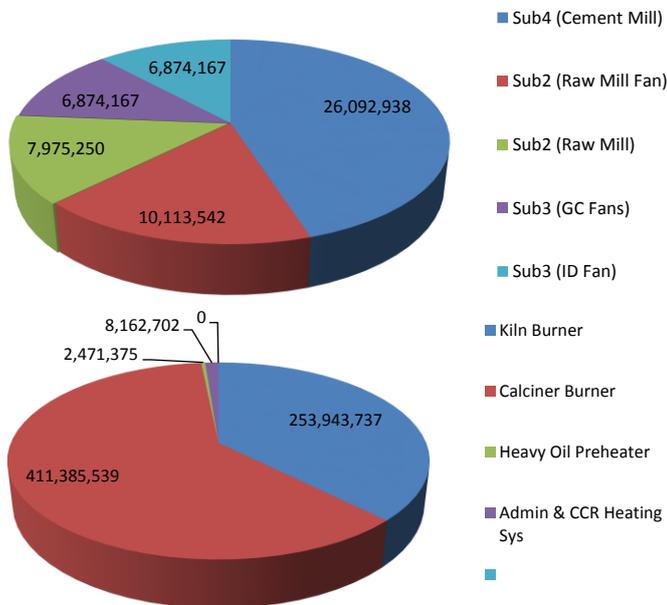
The plant has one production line with two raw mills, two cement mills and a single rotary kiln supported by a tower of preheaters.

The company has been certified on the management certificates according to ISO 9001, ISO 14001 and OHSAS 18001 with Integrated Management System (IMS).

SCC also plans to implement EnMS according to ISO 50001:2011 in cooperation with UNIDO.

Identification of significant energy users (SEUs)

The SEUs have been selected initially based on more than 80 percent of all energy users, which are illustrated in the below pie charts.

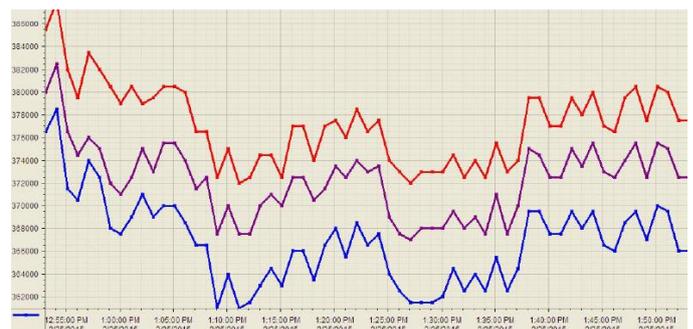


Main achievements

The outcomes and achievements of EnMS project have been highlighted below. They have mainly been extracted through the real feedbacks of the staff.

- Energy is a main concern throughout the organization. Almost everyone is cognizant of energy waste and general concepts of energy efficiency.
- The technical staff and especially the energy influencing personnel now believe that energy management requires more systematic approach than technological and complex modifications.
- It is understood in almost all levels of the organization that continuous improvement will bring out better outcomes than single projects of energy audit and energy efficiency measures.

- Joining an international project supported by UNIDO is not only cost/energy reduction achievement but also an outstanding step towards accreditation of the company and motivate the staff of being proud of working in such an organization.
- Referring to the published energy policy, direct and indirect staff have an identical perception of the merits of energy conservation. They believe that saving kWh does not only serve cost reduction but also is a measure to reserve the strategic fuel sources, improving the climate changes, and saving the environment and the planet to make it a better place to live.
- Using the UNIDO's tool could remarkably assist the involving people to think systematically, record and follow the data and trends, and analyse charts and features. EnMS project has been an enabling project even in terms of improving their software skills and capabilities.



For more information

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