## UltraTech Cement's Energy Management Journey

Cement manufacturing is an energy intensive process. Hence, it makes good business sense to have a structured energy management program. UltraTech Cement Limited (UTCL) had adopted the ISO 14001 at all its 12 integrated cement manufacturing units in India and also had energy review committees at these locations. A detailed structured process to measure, review and manage energy consumption was required to strengthen its focus. Since UTCL has been proactive in adopting global systems and benchmarking against them, it was decided to implement ISO 50001 in 2011.

For UltraTech, ISO 50001 provided a platform to develop and implement an energy policy, establish objectives, targets and action plans, which take into account legal requirements and information related to significant energy use.

The process involved developing a cross functional energy team, with members from all energy intensive/non-intensive areas in a plant. It helped to:

- Define energy baselines for different areas in the plant so as to present a clear and comprehensive picture of energy consumption type wise – power, fuel type, etc.
- Define an energy review, that is define all energy consuming equipment with specifications.
- Provide energy metering, wherever not available, for effective and efficient monitoring.

The energy team was responsible for conducting energy audits, identifying losses, finding solutions and improving energy efficiency. The team also had to define an energy baseline, that is energy intensity (area/section level), followed by an initial energy review, area wise and at equipment level (even for offices).

All these steps compelled the team to consider all possible angles, for example, new equipment purchase, modification of existing layouts, change of design, etc.

The road was not always smooth: one major challenge was training the entire energy team on the application of ISO 50001 (EnMS). An in-house training program was conducted using experts from outside the factory. Another complex task was establishing an accurate energy baseline which required time, knowledge, dedication and motivation. Support and commitment from the leadership team helped tide over these challenges.

The exercise had multiple benefits, the most significant being a change in the approach of all employees towards energy management. It also improved the carbon footprint of the organization. UTCL is improving and marching forward on a green and sustainable path to growth, with four units already certified to ISO 50001, and more on their way.

❐❐❐

*"The implementation of the Energy Management System ISO 50001 had helped us a lot for a systemic approach towards energy management and improving energy performance at various levels of production as well as in different equipment. It has also helped us to further strengthen our overall energy management system including measurement, monitoring and control of wastage of energy at the point of use. It has also improved the satisfaction level of our stake holders."*

***- Mr. P. L. Mehta,***
***Sr. Vice President (Works),***
***M/s JK Lakshmi Cement Ltd,***
***Sirohi, Rajasthan***

*"The ISO: 50001 provides a systematic approach towards managing the Energy Resources in an efficient manner, reducing various Energy losses and providing approach to New initiatives for Energy Savings. It helps our company to reduce the Carbon foot print by enhanced operational procedures, logistics and adoption of Energy efficient procurement."*

***- Mr. K. K. Dave,***
***Chief Operating Officer,***
***Sesa Sterlite Limited,***
***Lanjigarh***

*"Implementation of ISO 50001:2011 (EnMS) has given a structure to the energy consumption activities. The implementation helped to identify and prioritize the main energy consuming activities and equipments. It has helped to devise a system for close monitoring of such processes and take informed decisions regarding any change in pattern of energy consumption. It also helped to improve operational efficiencies and brought about a change in maintenance as well as procurement procedure. The implementation of EnMS also improved the awareness of employees and associates about energy consumption. Overall the implementation has helped the brand image of the company by giving a positive impetus and increased its credibility among all stakeholders."* ***- Mr. Rajendra Nandi, Project Director, Dahanu Thermal Power Station, Reliance Infrastructure Limited***

*"By maintaining and improving the energy management system in accordance with ISO 50001:2011 reaps the benefits of Increase Energy Cost Savings by Reducing Energy Costs via a Structured Approach to manage our Energy Consumption thereby achieving Energy Conservation…; Improved Operational Efficiencies, Energy Efficiencies and Maintenance practices; Enhanced Energy Performance throughout the Supply Chain with Energy Efficient Procurement & Services."* ***- Mr. R Jayakumar, Executive Vice President (Works), DCW Limited, Sahupuram***