

Energy Efficiency Pays Off

Introduction to the Israeli Energy Management System (EnMS) –Horizontal & Vertical Guidance

Industry (e.g. beverages) and the service sector (e.g. hotels) can make substantial savings (30% or more of the net profit) by implementing an Energy Management System. Realizing a certified ISO 50001 Energy Management System requests a high degree of engagement, technical background and resources which are often not initially available in the industry and Service Sector. Within the European Union Twinning Project –Support to the Israeli Ministry of the Environment an adapted Energy Management for Israel has been developed. This facilitates an easy entrance into saving energy costs for Small and Medium Enterprises and helps large Organization to stepwise implement energy efficiency into their day to day routine.

A ‘Horizontal’ Technical Guidance consists of basic elements and requirements of an EnMS similar to ISO 50001, easily to understand and to implement. This ‘Horizontal’ Guidance covers all what the organization requires to be effective in increasing its energy performance.

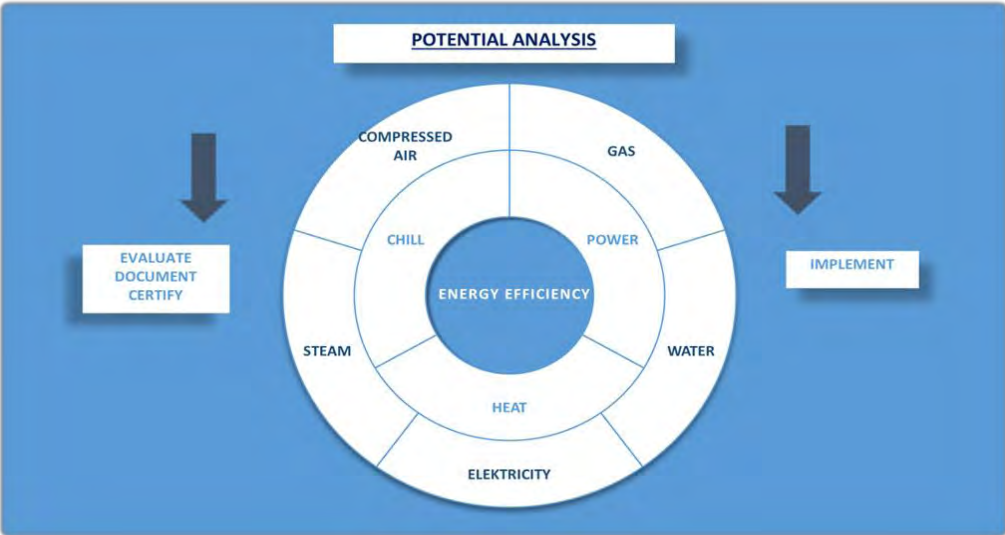
‘Vertical’ Guidance was issued for the industry and the services sector-specifically tailored for beverage production (fruit juice) and hotels. These guidelines have the character of Manual that shall enable the organization by implementing an Energy Management (EnMS).

Basis of the Horizontal and Vertical guidance is an adapted Energy Management (EnMS). The ‘Adapted EnMS is based on a methodology which has been defined for Small and Medium Enterprises in the German ordinance for energy tax refunds to verify effective energy efficiency action .

This methodology enables SMEs to implement a stepwise Energy Management System without the need of external support. Based on that, this Energy Management System can be extended subsequently to a more extensive EnMS according to ISO 50001.

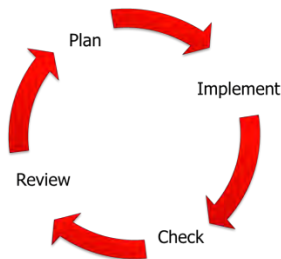
Starting with the compilation of data about energy use, measuring the energy consumption by the utility meters a cost/benefit analysis is executed to identify actions improving energy performance.

Auditing the significant area of energy indicates opportunities to improve energy efficiency by a potential analysis:



Top Management reviews this and acts upon this taking decisions concerning an implementation program. In an adapted energy management this concept will be supported by the EMDT - energy management documenting tool used to protocol and computer

The adapted Energy Management (EnMS) core principles use the PDCA (Plan/Do/Check/Act) cycle and the continual improvement process:



These results are used to improve the Organizational Energy Performance through technical and organizational measures, furthermore as evidence for applying financial contribution from incentive programs or regulations or for any other beneficial program.

The main economic advantages are reduced energy consumptions and costs. This will become immediately effective, will cause the modernization of technologies and by that a higher economic performance of the enterprise, increased the competitiveness in national and international markets.

It is essential to engage SMEs in a broader scale implementation of Energy Management because of the energy saving potentials, cost savings for enterprises and also the reduction of GHG emissions due to measures of increased energy efficiency. Hereby the impact mitigation of climate change and the economic benefits will go hand in hand.

This Adapted Energy Management also serves very well as a basic step to an Energy Management System according to ISO 50001. By that way, the efforts to implement ISO 50001 could be also reduced as the core principles and essential of an Energy management System are already in place if the Adapted EnMS has been implemented.