

## **What is Energy Management?**

The aim of energy management is to achieve organizational objectives at minimum energy consumption and cost, but it is worth emphasizing that the operative word is "management".

Three key principles of energy management are:

- Purchase energy at the lowest available price
- manage energy consumption at peak efficiency
- utilize the most appropriate technology

within these principles lies a complex matrix of knowledge and skill requirements. For example, managing energy consumption at peak efficiency can involve activities ranging from auditing, to specifying retrofit measures and analyzing the resulting return on investment, to monitoring and targeting, to conducting employee and tenant awareness educational programs, and more. The energy manager typically will have responsibility for advising senior management on energy reduction strategies, for gaining commitment throughout the organization, for managing the implementation of measures, and for dealing effectively with contractors and energy suppliers.

The skill set includes technical knowledge of contemporary building energy systems and energy rate structures, analytical techniques for assessing energy use, financial management methods for evaluating energy efficiency investments, and "social marketing" skills for building organizational commitment. For an individual employed in the facility management field, it would probably take up to a year of study to develop the necessary competencies.

The first aim of energy management should be to gain control of consumption and costs by assessing current use, and by taking steps to incorporate energy efficiency into the corporate culture. This often involves:

- Identifying, and quantifying, your organizations major users of energy

- Reviewing energy purchasing strategies-the fuel and billing rate structure choices-to make sure that the most appropriate energy sources are being exploited and that they are being bought at the right prices.

- Assessing operating practices-your heating plant, lighting and ventilation control strategies to ensure that existing plant and equipment is being operated at maximum efficiency.

- Motivating and training practices-energy awareness-raising campaigns and training programs for all individuals and groups whose actions can affect consumption

Energy management in industry:

In many industrial organizations, energy management is a low priority item.

All industrial companies can benefit from exercising good energy management. Savings of at least 10% and up to 40 % can be realized by implementing some useful energy management techniques. The key to achieving savings is to take a strategic approach to managing energy use and giving importance to energy management techniques. While energy efficient technologies have a significant role to play in reducing energy use in industry.

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