

# PROJECT PARTNERS

# EMSPI

Energy Management Standardization  
in Printing Industry



Co-funded by the Intelligent Energy Europe  
Programme of the European Union

## ENVIROS

Czech Republic, is a leading consulting company providing assistance mainly in the field of energy, environmental and business consultancy.

## FACTOR

Spain, is well recognized for its knowledge on developing and applying climate change policies, mitigation and energy efficiency assessments.

## INNOWISE

Germany, is a research & consultancy company with special expertise in innovation management, knowledge & technology transfer.

## GRAKOM

(Graphic Association Denmark), Denmark, is the principal organisation for Danish graphic companies composed by graphic production companies producing printed and electronic products.

## DIENSTENCENTRUM

The Netherlands, supports around 400 media enterprises per year (mainly SME's) in their management of their business. Dienstencentrum is also coordinator of the EMSPI project.



## THE FULL SCOPE OF ENERGY MANAGEMENT

Taking decisive actions in reducing the energy consumption in your company, is a task that maybe sounds easy in the beginning, but is sometimes much more complex to bring this in practise. Most of the entrepreneurs want to delegate the energy coordination task to an employee of his or her company. But this strategy only works when the entrepreneur realizes that the start of the implementation of an energy management system actually starts at the management table. The coordinator should feel all the support from his or her manager to make the implementation a success. This is because it is always for a coordinator quite difficult to change the mind set of his/her colleagues. It is even impossible when the coordinator doesn't have the full back up of the

And there we have the first main barrier for a company to be as successful as possible in reducing their energy consumption: the dedication to the job at hand and the fact that energy is an aspect that nobody can see. It is something else than waste management, which is an issue that everybody in the company can see. Creating more waste is visual at the workplace, but generating more environmental impact by using more energy is not. Energy is an invisible production resource.

After years of experience in the creative industry we can conclude that entrepreneurs who are willing to invest in their employees and business strategy, are more successful than others. These kind of companies are innovators or early adopter of the business and find every time new opportunities to stabilize or even enlarge the capacity of their business, independent from the economic situation their sector is in. For these kind of entrepreneurs, it will also be easier to implement a management system, such as the ISO 50001, energy management. They have a clear viewpoint what the (financial) benefits could be to work in a constructive way with complex technical energy matters. For them it is all about Business Risk Management (BRM) and Stakeholders Expectations Analyses (SEA). They have the idea that if they incorporate energy management into their own general business concept, they are capable of reacting in a more effective way towards the (future) customer's needs. Bottom line: Energy management is all about thriving your business well.

It is our experience that most of the entrepreneurs are not easily willing to start with an energy reduction plan. In their opinion it costs valuable time and money and the results are unsure. These days we know better. Working on energy reduction is similar to working with your employees on improving the company.

For more information about this project and deliverables, visit the website: [www.emspi.eu](http://www.emspi.eu). You can also find and download the reports at the website.

But we have to be realistic. Not all the entrepreneurs are innovators or early adopter. And that is also not a must. Most of the entrepreneurs belong to the great majority of companies, who plan their own strategy on the behavior of the smart guys in the business. It is 'OK' to act like this. But only 'OK', when you really act when the smart guys have taken decisive action. Otherwise your company is transforming in a Laggard, a dinosaur. And we all know what happened with them.

## DEFINITION OF ENERGY MANAGEMENT

The definition shows that energy management and an energy management system have three angles:

### The organization

Energy management is embedded in the management and organizational structure. Essential aspects are planning, monitoring, information management and defining responsibilities.

### The technique

The approach to energy management is dependent on the process and operating conditions which are specific for each sector. Technical measures are always part of it, both within the (production) processes in information.

### The behaviour

The approach to energy management takes into account the social aspects of business operations, such as management style, attitude and behaviour of employees and the organization.

### Definition Energy Management

*Energy management is conducting a structural and economical way of organizational, technical and behavioural measures to minimize the use of energy, including the energy for the production and use of raw materials and consumables.*

## COMPONENTS OF ENERGY MANAGEMENT

### Energy policy statement

Your company should start there with the introduction of energy management where clear benefits are to be expected. You can, for example, in the first instance set up compliance with legal requirements, by addressing the causes of energy waste or focus on efficient use of energy.

As increasing experience of the company and its energy management begins to take shape, programs and techniques can be put in operation to further improve the energy performance. If the system grows into adulthood, environmental considerations, including energy issues, may be included in all business decisions.

To ensure success it is important that the executive level (management) of the company is committed to the improvement of energy management and developing or implementing an energy management system. The company-management can demonstrate this commitment by endorsing the policy statement and by providing sufficient employees and resources.

### Planning

Planning consists of four closely interrelated elements. A good initial energy analysis, an inventory of all energy aspects is the starting point. The second element is identifying legal and other requirements (the baseline), necessary to assess the current level of energy to the desired maximum level power consumption. Based on these two surveys goals and targets can be defined, which are then specified in more concrete actions in an energy management program.

The policy, but even more the goals and targets of an organization, must be based on knowledge of total energy consumption and how it is connected or can direct be attributed to activities, products or services of the organization. The inventory of the energy aspects and its analysis is a continuous process in which the past, present and potential impacts (positive or negative) of the activities of a company on the power consumption can be established.

### Implementation

A company is constantly being confronted with changing requirements of stakeholders, operates in a dynamic business environment and with a self-imposed process of continuous improvement. This means that also the requirements of the commitment and the competences of the company and its employees constantly evolve. To achieve the energy objectives of the company, it should focus on her people, systems, strategy, resources and structure and align them together.

Many companies can deploy their energy management stepwise. The implementation level should be consistent with the level of consciousness of the energy demand, energy aspects, expectations and benefits and availability of resources.

### Control and corrective measures

Measurement, monitoring and evaluation are the main components of the energy management system in order to achieve performance in accordance with the established energy management program. The results of the measurements of performance need to be evaluated at least once a year and will have to be assessed in relation to the control mechanisms and energy objectives and targets.

There should be a periodic evaluation of compliance relevant laws and regulations. The findings should be documented. The necessary corrective and preventive measures must be identified and documented as well.

### Management involvement

The companies' management should assess periodically the energy management system to ensure its effectiveness and need to the ongoing capability. An energy management system should be subject to continuous improvement to realize overall improvement in the energy performance. The subject and the scope of the assessment of the energy management system should be wide enough to address energy aspects of all activities and the products or services. Also the impact on the financial performance and possibly on the competitiveness of the company need to be included.

## BENEFITS

- 1 **Effective and efficient management of energy consumption**
- 2 **Quantify effort and results**
- 3 **Easy to demonstrate that the company meets certain requirements**