ISO 50001 AS THE BASIS FOR IMPLEMENTING AN ENVIRONMENTAL MANAGEMENT SYSTEM

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Abstract: By the publishing of new standards for energy management system the international organization for standardization provided a new type of tool for defining the possibilities for company cost reduction as well as for indirect protection of natural resources. This tool can make significant contribution to the field of environmental protection in this period of global economic instability. The majority of organizations are looking for ways to reduce their expenses, and give priority to the economic aspect. The environment management system is determinant to provide the economic stabilization to the companies by applying the ISO 50001. This tool clearly demonstrates the company’s cost-saving options which might be of interest to a unilaterally minded management and it has direct interest in global environmental protection. This article discusses the possibility of using the standard as the first steps towards the introduction of an environmental management in companies with a defensive approach to environmental protection.

Keywords: environmental management, environmental protection, ISO 50001


Ključne reči: upravljanje zaštitom životne sredine, zaštita životne sredine, ISO 50001

1. INTRODUCTION

Despite the growing environmental awareness, in practice market environment, the main attention is still often focused on economic considerations. Despite the increasing pressure of legislative proceeding in favor of environmental protection, many organizations are confronted to their respect and interest in the organizations of such a systematic approach to managing its environmental aspects. This approach mainly depends on the environmental awareness of top managers. If the organization is not subject to direct pressure from their customers to implement an environmental management and if the top management is focused on achieving the best economic results, it is not possible to expect a proactive and systematic approach to managing environmental aspects and impacts of such an organization. Moreover, at the time of continuing economic instability in world markets and direct confrontation, small and large companies are concerned with the global economic crisis and in this case, economic stabilization is achieved through the reduction of fixed costs. Therefore, logically it is not possible to expect the implementation of environmental management by the company that is not force to do so by their customers.

Implementation of environmental management system such as ISO 14001 is still seen by a lot of managers and top representatives of companies as something extra, which requires the input costs of ill-defined benefits or potential cost savings. This particularly works for organizations whose activities go few beyond, or even not achieve legislative defined emission or environmental limits. Although the introduction of environmental management system was able to improve their environmental behavior, it is not considered necessary and economically as an unnecessary investment. On the other hand, there is a standard that should rather supplement ISO 14001 as its basis, and the ISO 50001 for system energy management. For the above mentioned reasons it is possible to assume that the standard ISO 50001 that defines requirements for the energy management system can precede the introduction of ISO 14001 and make the base for simplified implementation of environmental management according to ISO 14001. Question like why should this be so, or could it have already been so, were already mentioned in introduction. However, it is necessary to analyze the reality of this possibility and further discuss both standards and mainly analyze and compare their
a. Principle standards

The standard introduces principles guaranteeing the analysis of existing manufacturing processes, the reassessment of their use and the optimization of the use of production facilities and human resources. It deals with the management system and energy management in order to determine their optimal use and to achieve cost savings. It specifies the simple principle, the management of company define their goals and plans in the field of energy policy and these goals are gradually performed by the set of procedures and their effectiveness is measured and monitored by the organization to take effective precaution.

2.2 The contribution of standards for the organization

- It primarily delivers significant energy savings in the main production process and it saves money on expenses.
- It helps to optimize the utilization of production equipment to lower consumption.
- It helps to optimize the organization of work in order to save heat, air-conditioning and lighting.
- It allows to influence future consumption when planning future productivity.
- It confirms the importance of integration and optimization of quality management systems, energy management and environmental protection

2.3 Advantage and disadvantage of standards:

+ Standard is an excellent tool for any organization because it constitutes a significant energy savings what is confirmed by several studies and practical applications even if only for a relatively short period.
- Due to the short history of ISO 50001 it is necessary to wait to detect any deficiencies.

3. ISO 14001 STANDARD

a. Principle standards

The standard defines a simple methodology, that management of the company define goals and plans in the field of environmental aspects and impacts of their activities (although only complete the legal limits). These plans and goals are gradually accomplished with appropriately configured procedures, which are monitored and measured in order to take effective steps for changes if needed. Standard imposes upon requirements for document management, human resources, infrastructure, implementing processes to communicate with the authorities and the public, and it is allowing the measurement of process performance through internal audits.

b. The contributions of organization are:

- An effective tool to manage effects of the organization’s activities on the environment.
- Create a reputation of a prestigious company in the field of environmental protection.
- Reduce future costs resulting from the planning production of infrastructure especially in conjunction with the quality management system.
- Early recognition of problems and prevent any accidents, effective risk management.
- Providing more guarantees for the fulfillment of legislative requirements.
- Energy and material resources savings [2].

3.3 Advantages (+) and disadvantages (-) of standards

+ Standard is a good tool for helping to achieve the accomplishment of legal requirements in the field of environmental protection by reducing the risk of unexpected accidents. It is universal and applicable in all areas of human activities. Its structure is suitable for integration with other standardized management systems.
- Certificate ISO 14001 is often underestimated by the authorities and also top leaders of organizations even if companies which are certificated present significantly lower risk with legal requirements and the emergence of unexpected events with negative impact on the environment.

4. STRUCTURE OF STANDARDS

As follows from the above brief summary and the descriptions of both standards it is not necessary to analyze and compare the structures of both standards in terms of the utilization of the structures of a system for the subsequent implementation of the second one.

As every ISO standards for management systems these are also based on uniform PDCA cycle methodology. It facilitates the introduction of multiple systems using a single structure and therefore it supports the development of integrated management systems. The same philosophy is shared by ISO 50001, as it was assumed that this standard will be integrated into environmental management system ISO 14001 and it will create a superstructure that is more detailed and focused on energy issues. From a technical point of view it is possible to conclude that the using of established structures of energy management according to ISO 50001 it is subsequent possible for subsequent simplified implementation of environmental management system according to ISO 14001. Whether and why this process of introducing an energy and environmental management should be relevant in practice, it is determinated by top representatives of the organizations themselves. They usually assess it in terms of attractiveness or standards for achieving its economic goals.
5. ACTRRACTIVENESS OF STANDARDS

When it comes to assessing the attractiveness of standards it is important to take into account in particular and within specific standards the awareness and attitude of the organization itself and its top managers. Top managers of companies are the people who define the strategy and development of a given company and therefore they take the decision concerning the introduction of management systems and their subsequent certification. Organizations that have not been forced to introduce an environmental management system and have not felt the need to systematically manage their environmental aspects and risks, will hardly look for motivation and the reasons for introduction of the ISO 14001 system even though their economical activities have achieved a significant success. Top managers of such organizations perceive environmental management system as surplus and their environmental awareness of the issue is purely financial. They do not see saving opportunities that a properly implemented and maintained environmental management system offers mainly with the possibility of reduction of material inputs and waste generation etc. The belief that a standard and system established according to the standard will help them improve those factors is small and standard or potential certification is less attractive. Perhaps this is due to the relatively poor marketing and proven results. Despite of the great popularity of ISO 14001 as the second most widely certified management system in the world, the importance and benefits of the quite well-established standards is limited only for opportunity to better manage environmental risks and increase the company’s image. For the unilaterally economically minded managers the ambition of economic stabilization of the firm that could exist on the market without ISO 14001 certification, the above mentioned arguments are not so attractive and their effort to reduce total fixed costs of the organization is not convincing.

For so-minded managers is newly published standard for energy management system ISO 50001 more attractive. This standard presents clearly the main purpose of energy saving and its efficient and economic use. For this reason, it can be assumed to be a useful tool for a wide range of top managers. Partly for those who consider only economically it offers an opportunity and for those who see the benefits of savings in addition to the standards in the environmental sphere. There is a matter of time that ISO 50001 will be adopted and supported by the management and introduction of an energy management system [3]. Of course, the motivation is saving company’s costs. In the case that a system of energy management really shows savings energy costs in the company, it will have strong support in the leadership of the organization. Building and improving such a system will be a priority for top managers and therefore can be assumed that the overall structure and operation of system will be in the high level. Based on this strong and correctly maintained structure of the energy management system it is possible implement without significant cost even the environmental management system. The decision of top management of organization concerning the introduction of ISO 14001 after previous good experience with ISO 50001 is easier than in the case of a decision to introduce ISO 14001 with no previous experience with the successful ISO 50001. In addition, built structure of the energy management system brings benefits in the form of savings and it is useful for environmental management system and thereby saves many other costs that the company would have to spend in independent implementation of ISO 14001. In this case, any small requirement to the introduction ISO 14001 with „stakeholders“ by top managers is more acceptable than if they were venturing into the implementation of ISO 14001 from the beginning and separately [4].

Based on the above it can be alleged that the road to implementing an environmental management system could be easier and more acceptable to the dismissive minded managers through successfully implemented energy management system according to ISO 50001.

6. CONCLUSION

Unilaterally economically minded managers are often negative for the introduction of standardized management systems such as ISO 14001. Their priority is saving costs and the introduction of environmental management system is perceived as additional costs. As shown in the article, that managers need the tool that offer a clear opportunity for cost savings. The energy management system according to ISO 50001 is such a tool. After the successful implementation and demonstration of the economic benefits of energy management, top managers are more willing to agree to the implementation of other tools. Throughout the structure already built within the system it is possible to introduce more systems e.g. EMS according to ISO 14001 with a much lower entry costs.

7. REFERENCES


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