



AUDIT ANALYSIS AND STUDY OF CONTROLS ON THE BASIS OF THE INTERNATIONAL STANDARD OF ISO 50001

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Abstract

In this article, on the basis of the International ISO 50001 standard, the resources for improving audit efficiency and the creation of necessary conditions for the acceleration of the country's economy, the way of energy-saving development, and one of the implementation methods, the importance of control in the performance of the tasks defined in the "Energy Strategy of Uzbekistan" researched.

Keywords: conducting audits, conformity assessment, energy saving, energy standardization.

Uz energy inspection supervises the installation of renewable energy sources by state bodies and organizations based on the decisions of the President of the Republic of Uzbekistan and the Cabinet of Ministers, and in case of non-fulfillment of the specified indicators, measures are taken against their officials. Submits proposals to the Cabinet of Ministers. [1]

During the planned period of audit of the energy management system ISO 50001, the organization will have to conduct system audits. Ensuring that the system meets standard requirements requires effective implementation and maintenance. The regulation and inspection of these works are monitored in accordance with the ISO 50001 Energy Management System audit plan.

The audited processes and areas, as well as the results of previous audits, should be planned taking into account the status and importance of the audit schedule. Ensuring the impartiality of competition audits and the audit process should be defined as an important task.





A senior management plan for analyzing the viability of the energy management system must be approved by senior management during the system analysis.

Through compliance assessment, the organization can: top management on a periodic basis to ensure compliance with the approved energy policy; to demonstrate this continued compliance, primarily to their business partners; It is necessary to obtain a certificate of conformity from the certification body and implement an energy management system in accordance with this standard.

The ISO 50001 standard is a recognized framework for integrating energy efficiency into practice designed to ensure organizations [2]. Multinational organizations will have access to one. Define and implement an agreed-upon standard of improvement that includes a logical and consistent methodology for implementation across the organization.

The standard helps to:

- helping organizations make better use of what they have energy-intensive assets;
- ensuring transparency and facilitating rational communication use of energy resources;
- to support the introduction of best practices of energy management and encourage rational use of energy;
- assessment of objects and assistance in determining the priority of introduction of new ones energy saving technologies;
- creation of conditions for increasing energy efficiency in order to ensure;
- improvement of energy management in projects aimed at reduction greenhouse gas emissions;
- integration with other management systems of the organization, for example environmental systems and labor protection management systems [3].

What are the prospects and benefits of implementing the ISO 50001 standard?

"Energy management in the enterprise"? The standard allows organizations to have an effective mechanism for increasing energy efficiency through various levels, reducing costs, improving environmental indicators, and rationally solving both technical and management problems of energy use. The introduction of the ISO 50001 standard allows enterprises to move to a single management model generally accepted in the world and gradually reduce energy consumption to a pan-European level, as well as to encourage the modernization of enterprises and municipalities.

Ken Hamilton (ISO/PC 242 expert) described ISO 50001 as "very".





Pragmatic standard" helps companies to integrate energy management into business practices [4]. This allows companies to reduce energy costs and improve energy efficiency throughout the supply chain. He cited the experience of two enterprises as an example. Dow Chemicals has reduced energy consumption by 17.9% over two years. At the same time, the principles of ISO 50001 are being successfully implemented by small business entities. Thus, a company from Houston, employing 36 people, managed to save 14.9% over 2 years on a value of 250 thousand US dollars, and all this with zero capital investment.

Republican companies are no less interested than foreign companies in implementing energy management and thereby improving its energy efficiency - and in this the real help of the ISO 50001 standard is undeniable [5].

In the republic, energy management elements are already used in many enterprises. For example, programs and projects are being developed and implemented to save energy, enterprises are introducing more energy-saving equipment, analyzing opportunities to improve energy efficiency in individual production and processes, and many organizations are conducting energy audits.

Within the framework of the anti-crisis measures program of the government of the republic, it is included in the list of seven main priorities of the policy of increasing the energy efficiency of the economy [6]. Together with the Ministry of Energy of the Republic, the Ministry of Economic Development has developed a set of development measures based on the following: improving the modern legal framework, the formation of organizational structures, increasing energy efficiency, creating state support and facilities to attract business. investment environment.

One of the main mechanisms of energy efficiency improvement is to create an excellent regulatory framework for energy conservation. It is necessary to increase the existing regional and broad consumer culture.

Currently, the energy consumption of equipment, machines, and devices for which indicators are regulated in the republic are selected based on the existing indicators of several dozen state standards. In order to reflect the energy efficiency indicators, it has been practically determined that high results can be returned by introducing modern meters.

Coordination of the work of legal regulatory objects and subjects in the field is usually carried out due to the lack of organizational structures that often operate in real terms.

ISO 50001:2011 enables organizations to:

- development of a more efficient energy use policy;
- setting goals for the implementation of this policy;
- better use of available information to make decisions on energy consumption;





- measurement of results;
- assessment of policy effectiveness;
- continuous improvement of the energy management system.

The main objective of ISO 50001, the current management practice of organizations, is to integrate energy efficiency.

The introduction of energy management systems should be required as one of the main means of implementing the energy saving policy in the republic's enterprises.

The requirements of the ISO 50001 standard are very relevant and the reasons are the need to introduce energy management systems and the relevant standards for the republic are as follows [7]:

1. National programs on energy efficiency and renewable sources are part of the energy and energy management system and standards.
2. Energy management systems and the ISO 50001 standard are used in all areas.
3. Energy management systems shape the development of services in the area, including energy efficiency, and create new jobs.
4. The energy management system accelerates the innovation and introduction of technology.

Therefore, the energy efficiency improvement strategy helps to reduce costs and improve the environmental component of the activity ISO 50001:2011 organizations. Increasing the investment attractiveness of the company should serve the important benefits of introducing the energy management system.

In order to increase the efficiency of the use of fuel and energy resources and create the necessary resources, the conditions for moving the national economy to the path of energy-saving development should reveal the ways to implement the power strategy of one republic. Many believe that the solution to this problem depends on the implementation of the ISO 50001 "Employment Management System" standard in the country's enterprises.

The application of the international standard "ISO 50001 Energy Management Systems" allows organizations and enterprises to create systems and processes necessary for energy efficiency, including energy efficiency, energy use and energy consumption efficiency. Why, this standard defines specific requirements for the organization's energy management system (EMT) and applies to activities carried out under the organization's management. Its application can be tailored to match the organization's specific requirements, including the complexity of the organization's system, the level of data documentation, and available resources.

This standard applies to the design and procurement of energy-using buildings, structures, networks, equipment, systems or processes within the scope and limits of





EMT. The development and implementation of EMT will significantly contribute to the economy of the republic by including the development of the organization's energy efficiency, energy use and energy consumption policy, goals and objectives, action plan, while complying with (fulfilling) established legal and other requirements [8].

References

1. https://uza.uz/oz/posts/yoqilgi-energiya-resurslaridan-foydalanish-sohasida-davlat-nazorati-samaradorligini-oshirishchora-tadbirlari-to-grisida_454401
2. Хохлявин О.А. ISO 50001–системный подход к энергоменеджменту// Энергоаудит. 2009. №3/11.С.36-39.
3. Эдвин Пиньеро. Будущий стандарт ISO 50001 на системе энергетического менеджмента//Мир стандартов. 2009. №9(40). С.66-67.
4. Хохлявин С.А. Каким будет стандарт ISO 50001 в области энергоменеджмента?//Энергобезопасность и энергосбережение. 2008. №3. С.12-17.
5. <http://www.ecosys.com.ua/em/energymanagement.html>.
6. Хохлявин С.А. Стандарт в области энергоменеджмента США, Европа, Корея и другие страны//Энергоаудит. 2009. №2(10). С.34-39.
7. Электронный ресурс: <http://www.iso.org/iso/ru/pressrelease.htm>.
8. Романов Г.А. Повышение энергоактивности и перспективы энергоменеджмента в России//Энергосбережение. 2009. №5. С.21-32.

