



WISE USE OF ENERGY IN ADMINISTRATIVE BUILDINGS OF INDUSTRIAL ENTERPRISES

Andijan machine building institute, senior teacher

Egamov Dilmurod Abduraimovich,

Zulunov Muhridin Kamoliddin ugli

Andijan machine building institute Faculty of Electrical Engineering

4th grade student of "Alternative energy sources" department

ABSTRACT

This article analyzes data, indicators and experience on the topic of rational use of energy for administrative buildings of industrial enterprises. The article shows the important issues of energy technologies, energy efficiency and energy security. This article will be important for those who study scientific and practical issues related to increasing the efficiency of industrial enterprises, optimizing production processes and ensuring energy security.

Key words. Industrial enterprises, administrative buildings, electricity, resources, residential buildings, energy, alternative energy, solar, solar energy, rational use of energy, habits, economical devices, raw materials, enterprises.

Today, for most developed and developing countries in the world, the issue of effective use of all kinds of resources, especially energy, raw materials and materials, is urgent. Uzbekistan, as a country rich in natural resources, is interested in the development and wide implementation of energy-saving technologies, and the use of innovative approaches to the efficient use of energy resources. able to increase competitiveness in the domestic and world markets, which in turn will certainly help the growth of the economy [1-5]. Within the framework of the project, more than 30 industrial enterprises have preferential loans allocated at the expense of the International Development Association and commercial banks of Uzbekistan. These enterprises are using a number of conveniences, such as reducing the consumption of electricity and natural gas. 82 sub-projects on increasing total energy efficiency are being implemented in our country. According to estimates, as a result of the successful implementation of these projects, 500 million kWh of electricity and 187.7 million cubic meters of natural gas will be saved annually in our country. special attention is paid to the application of sources. In particular, within the scope of this project, the effective management system of industrial enterprises is being



improved, which helps to ensure competitiveness in production. That is, costs are reduced and product quality is improving. In this regard, innovation projects aimed at rational use of fuel and energy resources are widely used. We should be able to use the most optimal options or optimal solutions for the use of any type of energy in the administrative buildings of industrial enterprises [6-9].

For example, after determining how an industrial enterprise uses energy in its administrative building, a solution is sought. If the building is old, its energy consumption is higher than required, it is necessary to completely reconstruct the energy consumption of this building or it is preferable to replace it with new energy-saving devices (consumers). In accordance with the rules and regulations of urban planning in the commissioning of multi-apartment and multi-story buildings, multi-story buildings without the installation of small solar photoelectric plants, solar solar equipment, and other electrical and thermal energy-saving devices are not allowed to be put into use without the agreement of the Ministry of Energy. that buildings meet the requirements of energy efficiency and equipment with measuring devices for the energy resources used by choosing optimal architectural, functional technological, structural, technical-engineering solutions, they are correctly implemented during construction, reconstruction and perfect repair increase and ensure regular updating of catalogs of standards, technical design solutions requirements for individual elements, constructions of buildings and structures, equipment and technologies used in them, requirements that allow eliminating wastage of energy resources during construction, reconstruction, perfect repair and operation, are implemented and included in project documents organization; compensation of 25 percent of the energy resources used by enterprises and organizations for buildings and structures from renewable energy sources and establishing the services of energy service companies in improving the energy efficiency of facilities [10-13]. The Ministry of Housing and Communal Services, the Council of Ministers of Karakalpakstan, regional and Tashkent city hokimities for housing owners' associations and owners of public buildings and structures. In order to optimize the operation of centralized heating systems, heat supply implementation of comprehensive measures to improve heat protection in networks and buildings and structures (use of energy-efficient and energy-saving construction materials in newly constructed buildings and structures, implementation of measures to improve heat protection in existing buildings). in the introduction of energy-saving technologies and renewable energy sources, taking into account the geographical



location of buildings, social spheres and residential facilities, as well as energy consumption, takes measures to implement effective systems for ensuring the implementation of programs aimed at increasing energy efficiency. It helps to use energy rationally in administrative buildings of industrial enterprises, reduce energy costs and solve environmental problems. This is done through optimization of energy consumption, energy financing and automation. In addition, energy efficiency services for heat, healthcare and appliances will be introduced. Measures such as installation of energy kits, use of light energy sources (sun, wind) and renewal of heating and cooling systems are carried out in administrative buildings [14-18]. Such actions are necessary to see the true benefits of energy resources and create opportunities for industrial enterprises to reduce environmental problems. The rational use of energy in industrial enterprises is very important for the efficient use of energy resources, comfort and speed. It is also a common theme in this system to improve energy saving and consumption processes, reduce energy waste and support technical solutions. It is necessary to improve the quality of energy with the help of new technologies and innovations in industrial enterprises, to reduce energy costs and reforms, and to pay attention to social problems. These processes increase the production efficiency of industrial enterprises and reduce environmental problems. Industrial enterprises, administrative buildings constantly struggle with energy efficiency problems. This problem arises in the production processes of the building and in reducing or ensuring the amount of energy needed to heat it. Enterprise managers support various methods to improve energy efficiency. For example, energy efficiency can be improved through measures such as monitoring energy consumption, using new technologies, strengthening insulation and installing automated systems. An additional goal of such actions is to improve various indicators by reducing energy costs. This can increase the efficiency of the enterprises and develop the business more qualitatively and faster. Energy savings in office buildings is a very important topic for industrial enterprises, and there are several important ways to implement these processes. For example, technical solutions such as energy perspectives, energy efficiency improvement, automation systems and optimization of energy savings in production processes can be used. In addition, it is important to build new energy stores and implement energy storage facilities in the company's administrative buildings. With the use of these types of warehouses, business administration buildings can improve energy costs and efficiency for consumers. Issues related to strategic planning and attracting investments or ensuring energy security are also important for industrial enterprises.



It is necessary to work with professional consultants in these processes. Industrial enterprises, administrative buildings and energy sector need to carry out complex technical and initiative work to use external or internal saving aspect. It will also be related to the problems of improving energy efficiency, obtaining economic benefits and protecting the environment from the aspect of energy saving [19-21]. For administrative buildings and industrial enterprises, it is necessary to have energy-saving aspects, building materials (for example, insulation materials), heating and cooling systems, separating means (for example, closed systems) and other technical features. In these cases, new technologies and energy-storage methods can be used to increase the efficiency of energy saving. Using the energy saving aspect also helps to protect the environment. For example, with the production of heating systems through an automatic control system, consumers with heating and cooling equipment will soon become one of the most important parameters for consumer rooms. Attention is paid to the fact that the environment can become hotter when using such equipment. Such products are also very important for industrial enterprises. In these cases, energy efficiency can be converted into efficiency through energy saving and reduce investment costs. The goal is not to affect previous performance, but to conserve energy by turning it into efficiency.

Summary:

Within the framework of the project, 82 sub-projects on improving energy efficiency are being implemented in our country. According to estimates, as a result of the successful implementation of these projects, 500 million kWh of electricity and 187.7 million cubic meters of natural gas will be saved annually in our country. Energy efficiency in administrative buildings is of great importance in industrial enterprises. Energy efficiency requires the application of new technologies for the enterprise, the study of the possibilities of automation of production processes and reduction of energy consumption. Energy efficiency in administrative buildings can be implemented by working with light energy sources, separating the heating and cooling systems of closed verandas, automating lighting systems and monitoring the amount of energy consumption. These methods lower energy costs for industrial enterprises, reduce environmental impact and do not affect continuous operational characteristics. The implementation of such actions and the use of technological solutions that increase energy efficiency in administrative buildings can change the economy and environmental condition of enterprises. In industrial enterprises, it helps to use energy wisely, reduce energy consumption, return more often, and



improve quality. The rational use of energy can be determined by the following conclusions:

1. Efficient use of energy: Industrial enterprises should use technologies that can use energy efficiently through rational use.

2. Smart energy consumption: The most important guide for industrial enterprises is to support temporary technical means (techniques) that increase energy consumption through smart use.

3. Improve the quality of technical processes: As energy consumption is optimized and the quality of processes is improved, energy will be reduced and industrial enterprises will be more efficient.

4. Use of information technology (IT): Industrial enterprises can effectively use information technology (IT) to reduce energy consumption through monitoring and other automated methods.

Rational use of energy is one of the most important tasks of industrial enterprises. Through these methods, industrial enterprises can implement a strong and effective energy policy and increase its level.

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