



## ELEKTR ENERGIYASI TEJAMKORLIGI

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**Abstract:** *Improving the efficiency of electricity in today's industries and enterprises and preventing existing wastages is a problem for all of us. Achieving good results is also an increase in efficiency. Concepts of energy efficiency are reflected in all fields, and this article deals with the problem of efficient use of electricity in some fields.*

**Key words:** *energy consumption, norm, individual, electricity, shop norm, industrial enterprises, energy efficiency, product, technological process, norm, comparative consumption.*

Currently, the use of electricity in manufacturing plants and enterprises and its economical use helps to increase the efficiency of electricity. In this case, in order not to cause material damage to the company's account, the electricity corresponding to the unit product we need to understand the normative concept of energy consumption and electricity consumption. The comparative consumption of electric energy for the production of one product is the electric energy consumed per unit of product in the production of a certain technological process or product, which can be determined using the following formula;

$$d=W/A$$

in this verse:



W - electrical energy consumed in product production; A - the number of manufactured products; A power rating is an average rating, usually set by a guideline, used to check or analyze power consumption and provide incentives for energy savings. The indicators of the relative consumption of electricity and the norm of energy consumption can be in the form of soums or gross domestic product in terms of value. Depending on the purposes of calculation of the regulation of electricity consumption, it is divided into the following. 1. By term of validity (annual, quarterly, monthly, etc.); 2. By the level of installation (individual, group); 3. According to the composition of consumption (technological, general production); Calculation of electricity consumed during product production and evaluation of its normative indicators is a technological norm. Technological standards serve to control the consumption of electrical energy consumed in a certain workshop or technological process. Shop rate is the rate set per unit of production. The norm includes electricity consumed by the entire process, electricity consumed in the main and auxiliary technological processes, electricity used for cooling and lighting the workshop, as well as waste in the internal networks of the workshop. Shop norms are necessary for predicting the consumption of electrical energy consumed in this shop, and these norms are used in the development of factory norms in general. In general, the factory norm - one is set per product unit. This includes the electricity consumed for the production needs of the factory, the electricity consumption of the main and auxiliary workshops, as well as all products from raw materials to finished products.

It includes the costs of the processes up to the arrival and the wastes of all electrical networks. When considering issues of regulation of electricity consumption of a certain enterprise, the electricity consumption of another enterprise existing in this enterprise is not taken into account. For another enterprise, depending on the type of production, the standard indicators of electricity consumption should be established again. Energy and technological factors are taken into account when



determining the relative consumption indicators of electricity produced and electricity produced per unit of product. As a result of taking this factor into account, the accuracy of the calculation is increased, and when the parameters of the determined normative indicators are compared with the parameters of the established normative indicators, a realistic level of error is achieved. Such a result is achieved by determining standard indicators at each stage, i.e. general factory, general workshop, and technological stages. This structure consists of three steps. The first stage represents the factory stage. All electricity consumption in the enterprise is taken into account, that is, the electricity consumption of the main and production shops, heating, cooling, all the amount of energy consumed for their own needs, the amount of electricity waste, everything is determined, and the total enterprise is taken in proportion to the product being produced, and thus the single standard indicator for the general enterprise is determined. This indicator is determined using the following expression here:

$W_{se}$  - specific and auxiliary electricity consumption, kWh;

The amount of electricity used for heating, lighting, ventilation and hot water supply in the enterprise, kWh;

$A_{zavod}$  - volume of the product being produced; It is known that the consumption of electricity in industrial enterprises is not uniform, that is, depending on the technological process, depending on the change in the demand for product production, it is constantly changing and constantly depends on several factors. . As mentioned above, taking into account such changes, including factors, will certainly increase the accuracy of the calculation in determining the normative indicators. At the second level of the regulation structure, the issues of regulation of electricity consumption consumed by the enterprise are considered, and here the main technological needs along with the amount of electricity consumed by the

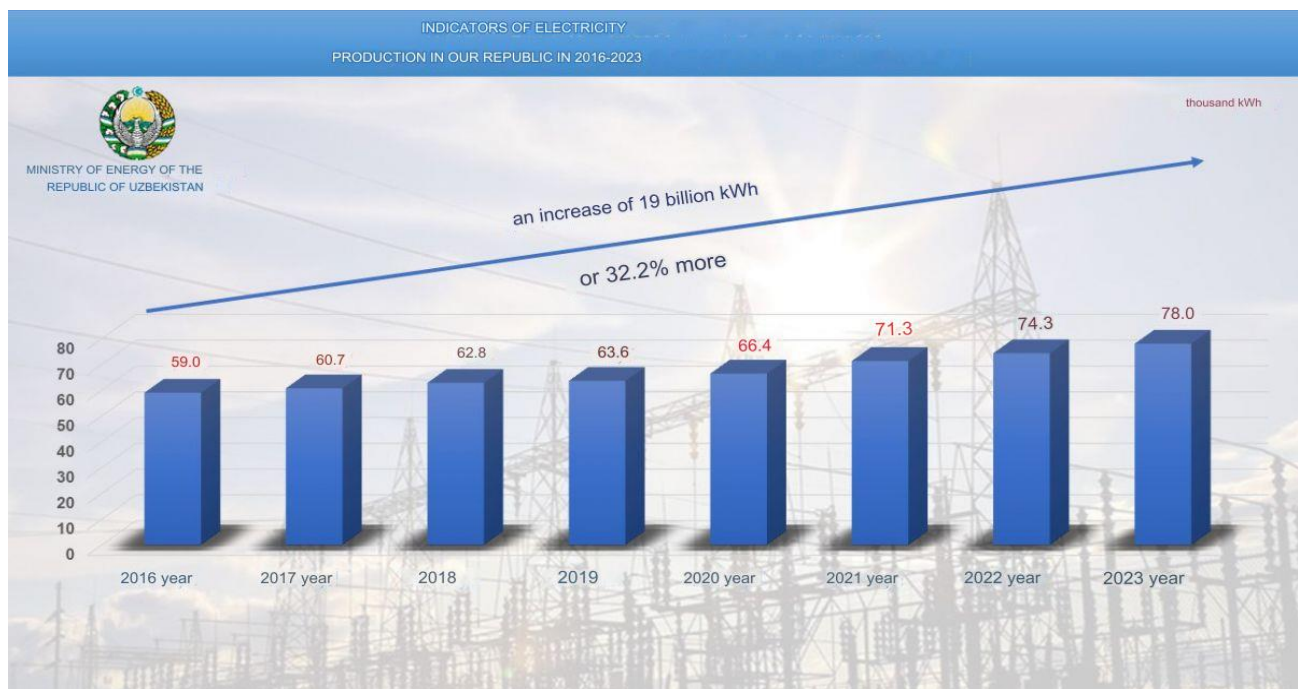


workshop for its own needs is taken into account. It is at this stage that the workshop standards for the product being produced are set and it is determined using the following expression:

In general, the rate of consumption of energy resources consists of the following: - expenses for the auxiliary process - expenses of electric energy in technological lines; - electric energy losses in the equipment; - consumption of electricity for technological processes. The third level of the standardization structure is considered to be the level representing the technological processes, where the standard indicators are set for the product produced according to a certain technological process, and this is determined using the following expression:

Here;

A is the volume of the manufactured product.



Indicators of electricity production in our republic in 2016-2023:



- 2016 - 59.0 billion kWh;
- 2017 - 60.7 billion kWh;
- 2018 - 62.8 billion kWh;
- 2019 - 63.6 billion kWh;
- 2020 - 66.4 billion kWh;
- 2021 - 71.3 billion kWh;
- 2022 - 74.3 billion kWh;
- 2023 - 78.0 billion kWh\*.

In 2023, the volume of electricity production was 19 billion kWh or 32.2 percent more than in 2016.

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