

## SYSTEMS USING NON-CONVENTIONAL RENEWABLE ENERGY SOURCES

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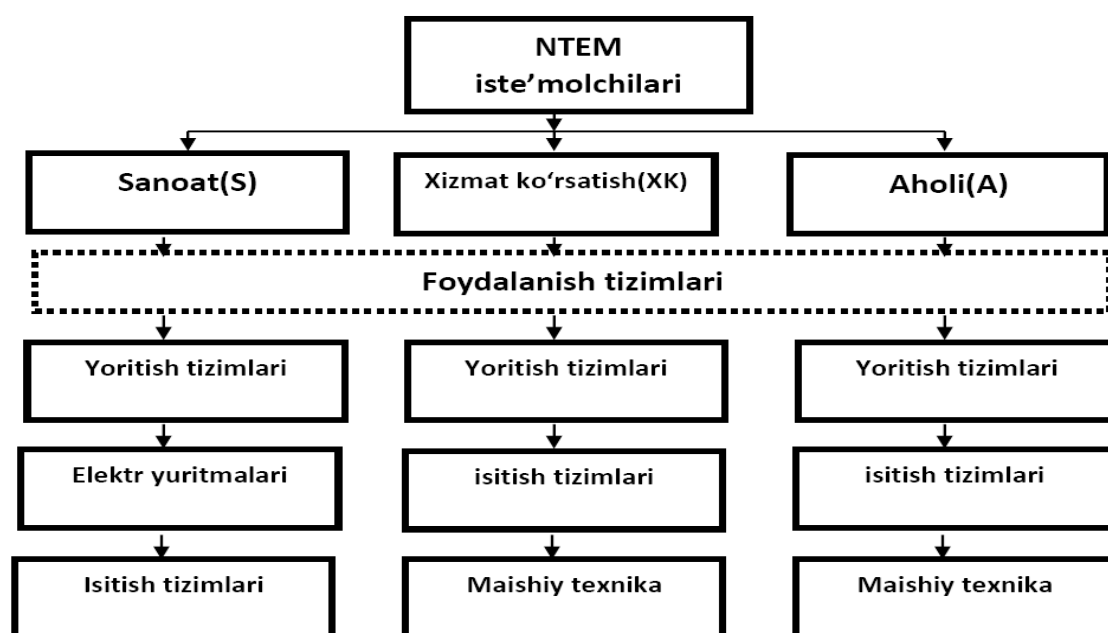
### Abstract

The article outlines systems for the use of traditional renewable energy sources, their production and application areas, and the structural scheme of the system of providing the population with uninterrupted energy.

**Keywords:** Traditional renewable energy source, energy resources, lighting systems, electrical appliances, heating systems, household appliances, consumer.

### Introduction

(Matthew 24:14; 28:19, 20) Today and future development cannot be imagined without energy sources. Demand for energy is increasing day by day. Not to be overlooked is the fact that the life expectancy of traditional energy sources is fading due to the declining resources. Also, the use of traditional energy sources is causing a number of ecological problems and global climate change. The fact that energy resources become expensive day by day also adversely affects the economy of many countries. Now, there is a rapid introduction of traditional renewable energy sources (NTEM) into our lives. However, the use of these sources has not become popular. Here, when we think about which consumers, how, where and when they can use their NTEM. First of all, if we divide NTEM consumers mainly into 3 types and consider usage systems (Figure 1):



Picture 1.

So far, NTEMs have not found a widespread taste in the industry and service sectors. Therefore, we stop at the energy use systems of the population.

The population uses energy mainly in the use of household appliances (MT), room lighting (YoT) and heating (IT) systems. We define consumers as I1, I2 and I3 respectively. For these consumers, R kW energy should be required. Let's say that consumers should serve energy sources A, B and S. Their average capacity at the time of operation is R1 kW, R2 kW, and R3 kW respectively. Suppose the following equations are appropriate:

$$I1 + I2 + I3 = R \text{ kVt};$$

$$R1 = R2 = R3 = R \text{ kVt};$$

So let's cite the following logical equation:

$$AvVvS = I1 + I2 + I3;$$

Here: v-sign means logical "YOKI".

Taking into account the foregoing, we bring a structural scheme of the system of providing people with uninterrupted energy (Figure 2).

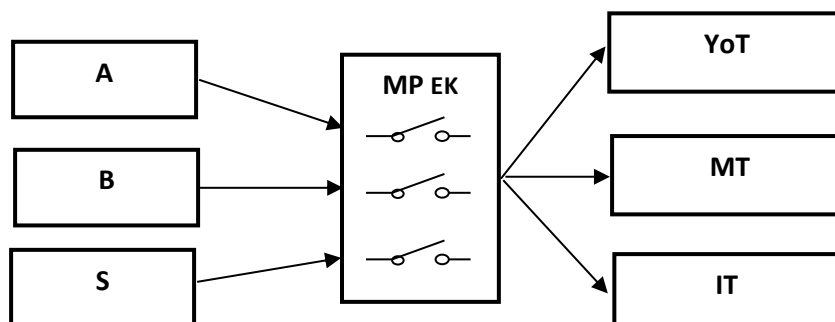


Figure 2. Structure scheme of the system of providing the population with uninterrupted energy.

## Adaptations

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