## Alternative Energy Sources in Ukraine, urgent problems and prospects

Vinnytsia National Technical University

## Анотація:

В статті розглядаються проблеми та перспективи альтернативних джерел енергії в Україні. **Ключові слова**: альтернативні джерела енергії, проблеми, перспективи, причини.

## Abstract:

The article deals with the problems and perspectives of alternative energy sources in Ukraine. **Key words:** alternative energy sources, problems, perspectives, reasons.

The problem of lack of energy resources is one of the most urgent problems of humanity. All of us have witnessed a impressive scientific and technological breakthrough, which resulted in hundreds of times increasing use of resources. Oil prices that hit all the records are a vivid proof of that. The only proved solution to the current situation is the use of non-traditional energy sources.

Using the energy of the sun, wind, tides and tides, bio fuels... They have enormous potential and inexhaustible possibilities. These alternative sources of energy are used, but not intensively. Why? The answer is very versatile and complex. The easiest solution to the current question is not to invent and develop something fundamentally new, but easy to use what we already have. But how much resources of the planet do we still have? Is it enough? It is still not possible to give an exact answer to this question.

For Ukraine, the issue of production of its own energy resources, the security of which does not exceed 40%, is important. The use of renewable (alternative) energy sources is one of the ways of solving the problem of energy supply of the country.

According to the Law of Ukraine of February 20, 2003 No. 555-IV "On Alternative Energy Sources": "Alternative energy sources are renewable energy sources, which include solar, wind, geothermal, energy of waves and tributaries, hydropower, biomass energy, gas from organic waste, gas of sewage treatment plants, biogas and secondary energy resources, which include blast furnace and coke gases, methane gas degasification of coal deposits, transformation of waste energy potential of technological processes".

Another reason for the lack of use of unconventional energy sources is the high cost of projects. This is true, but by investing one time, you will save yourself a lifetime. The payback of renewable energy projects typically ranges from 6 to 12 years and depends on a large number of factors.

Experts say that in the current conditions, we should not expect a boom in renewable energy, because there is no money to develop this industry in the country and they will not appear in the nearest future.

Most of the renewable energy facilities currently operating in Ukraine are built on EBRD loans or export financing by major producer countries. Nevertheless, by 2020, Ukraine has pledged to increase the share of "green" generation to 11%. Today it is about 6% of the total electricity generation in the country.

An example of this can be a solar battery. Indeed, at a cost, it is a bit more expensive than the installation and maintenance of wiring, but the savings are obvious! You will not now have to pay stunning bills and suffer from electricity interruptions. You will consume electricity as much as you need, without fear of ruining, and the system of accumulation of electricity will allow it to be used in the dark at night. Benefit, is not it?

There are many examples of energy savings. The main thing is the person's desire to use this alternative.

An enormous plus in favour of alternative energy sources is the environmental safety of such systems. Nothing is burned, nothing is allocated, no waste! Undoubtedly, people of the 21st century should already think about the problems of energy shortages and environmental safety, and switch to alternative energy sources.

## СПИСОК ВИКОРИСТАНОЇ ЛІТЕРАТУРИ

- 1. Альтернативная энергетика Украины: солнце, ветер и вода [Электронный ресурс]. Режим доступа: http://delo.ua/business/alternativnaja-energetika-ukrainy-solnce-veter-i-voda
  2. Всеукраїнська Енергетична Асамблея [Електронний ресурс]. – Режим доступу: http://uaea.com.ua/
- 3. Закон України від 20.02.2003 № 555-IV «Про альтернативні джерела енергії» [Електронний ресурс]. Режим доступу : http://max-energy-saving.info/index.php?pg= law/3.html

Никипорець Світлана Степанівна – викладач англійської мови, кафедра іноземних мов, Вінницький національний технічний університет, м. Вінниця, e-mail:fotinia606@gmail.com

**Дев'ятко Владислав Сергійович** – студент групи 2EM-14б

Nykyporets Svitlana S.—Teacher of English, Chair of foreign languages, Vinnytsia National Technical University, Vinnytsia.

Devyatko Vladuslav S. - Student of group 2EM-14b