

**МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
СУМСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ
КАФЕДРА ІНОЗЕМНИХ МОВ
ЛІНГВІСТИЧНИЙ НАВЧАЛЬНО-МЕТОДИЧНИЙ
ЦЕНТР**

**МАТЕРІАЛИ
X ВСЕУКРАЇНСЬКОЇ НАУКОВО-ПРАКТИЧНОЇ
КОНФЕРЕНЦІЇ СТУДЕНТІВ, АСПІРАНТІВ ТА
ВИКЛАДАЧІВ
ЛІНГВІСТИЧНОГО НАВЧАЛЬНО-МЕТОДИЧНОГО
ЦЕНТРУ КАФЕДРИ ІНОЗЕМНИХ МОВ**

**“WITH FOREIGN LANGUAGES TO MUTUAL
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GREEN TECHNOLOGIES AND THE PROBLEMS OF THEIR IMPLEMENTATION IN UKRAINE

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We can hear much information about green technologies nowadays. But what do these words mean? The concept of green technology means the use of renewable sources of energy and materials.

There are two main directions of development of green technologies: green energy and green transport. There is also a term "green house", but it concerns energy production and energy saving.

We know three most wide-spread kinds of green energy: hydroenergy, wind energy and solar energy. How can we produce electric energy using water? There are a few ways of it. We can use energy of falling water, energy of sea waves and energy of sea tides. These kinds of production electric energy are used only in industrial scale, because electric hydrogenerators are really huge.

Wind energy can be used for production of electric and mechanical energy, but the most wide-spread is production of wind electric energy. The main advantage of wind energy is production of electricity not only in industrial scale, but in houses too. There are many kinds of wind electric generators: small, big, huge, vertical, horizontal and so on. The main disadvantage of wind energy is instability. Ground wind is gusty and changeable and this does not allow to produce electricity all the time. But there is a solution to these problems. Electrogenerator aerostat can be used on height to 600 meters where wind is constant and powerful. But these generators are huge too.

Solar energy can be used for industrial production of electricity and water heating for houses. There are solar collectors for water heating which can be installed on the roof of the house or on the ground. We have two ways of electricity production using solar energy. The first is photoelectric panels. It is good for private houses and offices, but it is very expensive. The second is a reflector power

station which uses mirrors for collection of sun rays in reactor for production of electric energy. This way is only for industrial production, because for building power station we need huge area for mirrors. There must be thousands of mirrors.

What do we know about green transport? There are many kinds of green cars: electric cars, hybrid cars, solar cars, even electric sport cars. But these are all new kinds of transport. What should we do with 900 million cars in the world which use engines of internal combustion. The solution is green fuel. Palm, sunflower, corn, soybean and rape oil can be used in diesel engines. Petrol engines can use alcohol and biogas.

What is the situation with green technologies in Ukraine? We have not places in our country where wind is constant and powerful, the sun shines in Ukraine less than half of the year and we have not huge sea tides. New kinds of green transport are too expensive for Ukrainians. Even electric cars will not be ecologically friendly in Ukraine. The main part of Ukrainian electric energy is produced by nuclear energy and energy of fossil fuel. How can an electric car be green if it uses dirty energy for charging? So, what can we do? How to build green Ukrainian economy?

In the south of Ukraine we can use energy of sea waves for electricity production. In other regions electric generator aerostats can solve energy problems. Production of biodiesel exhausts our land, but thousands of restaurants and cafes produce more than million liters of used sunflower oil which can be used as a fuel for urban transport. Every private house can install solar collectors for heating. That is the correct way for our development.