

ENERGY EFFICIENCY: POSSIBLE SOLUTIONS FOR UKRAINE

The study deals with the problem of efficient use of energy. Some ways of decreasing energy wastes in Ukraine are suggested.

Energy efficiency means using less energy and transition to renewable sources of energy with providing good quality services [1]. The most energy efficient countries in the world are Germany, Ireland, Denmark, the UK, Norway, France, Austria, Italy, Mexico and Australia. That is why learning the experience of foreign countries in this field can be useful for Ukrainians [2].

According to European experts, Ukrainian consumers and businesses spend energy in a very irrational way. Energy consumption in our country is in 3,8 times higher than in most European countries. It has to be reduced on 55 – 75%. Another problem is that Ukraine uses too much fossil fuel, which makes 80% of all energy [3]. As a result, greenhouse gas emission here makes it one of the highest in the world. Rapid increase in the cost of electricity in our country motivates Ukrainians to search for possible solutions for reducing energy consumption, increasing efficiency and using alternative sources of energy more. All these factors reveal the relevance of our research.

The objective of the research is to demonstrate some ways of increasing energy efficiency in Ukraine.

For carrying out this research mostly Internet resources were used such as sites of international organizations and companies [1 – 4].

The research we have carried out let us outline some ways of reducing energy consumption in Ukraine. Finding solutions of energy problems in Ukraine is possible by uniting efforts of the government, scientists, businesses, educators and the citizens.

On the level of the government, energy efficiency policy should be implemented and monitored by the Ministry of Energy and Coal Industry of Ukraine. The Verkhovna Rada has to make all the required legislation changes. The State Agency of Energy Efficiency and Energy Saving of Ukraine should work with businesses introducing energy efficiency programs for commercial and municipal enterprises. Clear energy policy has to be introduced and controlled. Energy consumption audit has to be carried out and afterwards proper measures should be taken.

Scientists should make their contribution into finding solutions for energy efficiency. The Institute of Renewable Energy of National Academy of Science of Ukraine has been carrying out a number of studies of energy efficiency issues. They have developed some practical ways of renewable energy sources usage. It is also necessary to turn to sustainable energy use in transport industry (electric vehicles, alternative fuel stations, etc.)

Companies implementing green technologies should have some tax benefits. Ukraine Energy Efficiency Program (UKEEP) was created by the European Bank for Reconstruction and Development (EBRD), it helps Ukrainian private companies find money in order to invest in energy efficiency or renewable energy projects [3].

Aid from the world organizations (European Bank for Reconstruction and Development, European Union Development Program, United States Agency for International Development etc.) should be used properly and wisely. Both Ukrainian government and international organizations should grant financing of projects on energy efficiency, and provide low-percent bank loans on them. A good example of such projects is "Improving energy efficiency and promoting renewable energy in the agro-food and other small and medium enterprises (SMEs) in Ukraine", which was initiated by the United Nations Industrial Development Organization (UNIDO) and the Global Environment Facility (GEF).

Businesses and companies have to change old energy consuming equipment on the modern energy efficient one. They have to produce energy efficient home appliances and devices with proper marking (giving their customers all information about the energy consumed). They must also work on reducing the number of wastes and building recycling plants.

Citizens of the country have to be encouraged to sort the rubbish in order to provide paper, glass, metals, plastic etc. for recycling. In order to use less energy for heating thermal isolation of buildings must be done by individuals and companies. Ukrainians can cut energy consumption at home by using energy efficient home appliances and devices. Using LED lamps for lightning is also a great solution and allows cutting energy consumption on lightning in 10 times. Moreover, energy saving can be helpful at home when you turn off all the electric appliances when they are not used and increase use of natural light during the day.

Providing consulting services on energy efficiency is also very important. Universities, schools and other educational institutions should include energy efficiency courses in their curriculum in order to develop the new thinking in the young generation.

As a conclusion, energy efficiency is a key to saving the Earth for future generations as well as promoting economic development of Ukraine. All the ways of reducing energy consumption and increasing energy efficiency described in the presentation are to be used in Ukraine. This can bring multiple benefits: development of the national economy, reducing energy costs, saving money and enhancing quality of life, reduction of greenhouse gas emissions, improving national security etc.

REFERENCES

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