

ENERGY SAVING TECHNOLOGIES

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It is already known that the production of the energy we consume causes considerable damage to plants and wildlife, the environment and human health. This makes us think about the possibilities of more efficient use of energy, which will certainly contribute to the preservation of the environment and at the same time will be beneficial to the consumer. We consider that saving resources and energy is a real way to reduce costs and preserve the environment for future generations. Energy in the form of electricity, oil, or gas is not useful in itself. But work or other ways of using the energy obtained from these sources are an integral part of our daily life.

It is necessary to state, that invisible and secure power sources can be used to produce light, heat, mechanical work, etc. We call this use of power sources a useful application. Energy gives a person important “service” in the form of heat for heating and cooking, ensuring the functioning of industry and transport. We already know that fuel is needed to obtain this energy – oil, gas, coal, nuclear fuel, firewood, and other primary sources (sun, wind, water). In order to obtain this energy, special equipment is needed, for example, furnaces, turbines or engines, etc. If we can use low-quality energy (heat), we should not waste high-quality energy (electricity). This should be understood by the society. It is exceedingly important that scientists, politicians, and the public should be extensively involved in the process of forming the ecological view of the world of each citizen, creating a new way of life.

As a result, needs of the companies to a large extent, and in some cases completely, can be supplied with their own electricity. Single of the ways to solve the mentioned problem is the direction of development of the use of potential energy of excess pressure of natural gas in the gas transport networks of Ukraine for the production of electricity and obtaining heat.

This technology also refers to the direction of cogeneration and the use of energy waste potential, resulting in a significant reduction in natural gas

consumption. Ukraine has sufficient scientific and technical potential, developed technologies and production facilities capable of ensuring the development and production of highly efficient turbo-expanding plants of various capacities, construction, and operation of turbo-expanding power plants. (Andreev, 2016, p. 50)

So, we can infer that Ukraine has sufficient potential to implement combined heat and electricity generation technologies in spite of Russia's full-scale invasion. This direction is promising for implementation in Ukraine due to the fact that various financing mechanisms for the construction of cogeneration plants can be used in a short period of time when using existing equipment. In our country, we have every opportunity to set up and deliver to order the right amount of cogeneration equipment.

References:

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