

МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ СУМСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ ФАКУЛЬТЕТ ІНОЗЕМНОЇ ФІЛОЛОГІЇ ТА СОЦІАЛЬНИХ КОМУНІКАЦІЙ





## СОЦІАЛЬНО-ГУМАНІТАРНІ АСПЕКТИ РОЗВИТКУ СУЧАСНОГО СУСПІЛЬСТВА

МАТЕРІАЛИ ВСЕУКРАЇНСЬКОЇ НАУКОВОЇ КОНФЕРЕНЦІЇ ВИКЛАДАЧІВ, АСПІРАНТІВ, СПІВРОБІТНИКІВ ТА СТУДЕНТІВ

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## ENERGY EFFICIENCY IN ENERGY CONSUMPTION SYSTEMS

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There has been used four times more energy in the world compared to 1950 year. The main share falls primarily on households and the growing industry. The economic downturn in Ukraine and the countries of former USSR does not influence the consumption of energy – it remains high.

In recent years, power consumption of the national economy has grown by 46%, The average 30% increase is observed in the consumption of energy during the production of metal and other basic goods. In Ukraine energy consumpton per unit of product is 2.5 times more than in the US, and 3 times higher than in Western Europe. Electricity losses have grown to 120 billion kWh per year, or up to 13.5% of the production – mainly because of the decline in the industrial production, and the depreciation of equipment that has reached 63-75% and the reduction of energy use was due to the lack of energy.

The problems arising in the areas of energy have not been solved for many years and require immediate solution. According to various estimates 40% of all the energy used in the country is spent inefficiently. About 42% of local budgets has been spent on public subsidies and payments for energy consumed by public sector organizations (schools, hospitals, etc.).

Energy and water providers have no incentive to reduce costs, and local governments and the public pay technologically unjustified losses that far exceed the statutory (about one-third of the payment). It also raises many environmental problems which are already prevailing. If we have taken the most primitive, immediate measures to save energy, up to 40% of energy can be saved.

Also we should pay attention to the fact that energy prices have increased several times, and the tendency to increase rates is growing. Therefore, there is a large popularity of material incentives for constant savings that will allow to save a lot of money.

1. March Consulting Group (UK). Тазі с«Энергоэффективность в коммунальном хозяйстве», 1999. – 170 с.