**UDK 338.24**

*Kseniya Chichulina, Ph.D.,*

*Kyrylo Tolokonnikov, student*

*Poltava National Technical Yuri Kondratyuk*

**EUROPEAN EXAMPLES OF ENERGY-EFFICIENT DEVELOPMENT FOR UKRAINIAN ENTERPRISES**

Traditional energy efficiency policies relies on technological solutions. Only. While management efficiency, measurement and analysis remains a "non-digital". Examples of European corporations demonstrate how a comprehensive energy efficiency programme affect the efficiency of the business.

Companies that measure, manage and disclose data on energy efficiency, natural succeed. They understand how to optimize their processes, use of market opportunities, reduce costs, comply with regulatory requirements, to meet the expectations of stakeholders and there by develop sustainably, whilst managing risk.

**Examples: the Experience of European companies.** Energy efficiency has a close relationship with sustainable development and savings. Thus, there is a close relationship between energy efficiency and business efficiency in General. The following examples show how initiatives to improve energy efficiency was conducted in three European corporations, Dong energy, Stora Enso and Outokumpu.

**DONG Energy –**  energy group with headquarters in Denmark. Business of DONG Energy based on the procurement, production, distribution and trade in energy and related products in Northern Europe.

2009 was the first year when the company DONG Energy has included non-financial KPIs in their annual report. In 2009, the company conducted an audit of all buildings, installed sensors, optimized climate-control system and information system, and introduced an even greater number of videoconferencing rooms in order to minimize transportation costs. This initiative has led to an overall saving of 47.9 TJ by the end of 2017 On the basis of the contract concluded with the Danish government and in accordance with the new agreement for energy efficiency concluded in the end of 2017, DONG Energy plans to provide savings, equivalent to 308 GWh in 2020-2023 years.

**Stora Enso** is a global Corporation manufacturing paper, packaging and other products from hardwood with headquarters in Finland and production facilities in more than 35 countries. Stora Enso has set a goal to reduce greenhouse gas emissions generated by the production of what was supposed to be based on the reduction of energy consumption by raising productivity, the use of more efficient equipment, streamlining of processes, reduction of fossil fuel use and improving the efficiency of electricity and heat. In 2009 total energy (electricity) efficiency group showed an improvement of 3.0%.

To support the objectives for efficient use of energy, the group is conducting surveys to improve energy efficiency at least once in two years. She has assembled a team of experts on energy efficiency to identify energy-saving potential of production. In 2009 these initiatives resulted in savings of 320 GWh of heat and 32 GWh of electricity

**Outokumpu** – the sixth-largest company in the global stainless steel market with offices in 30 countries and with headquarters in Finland. the Outokumpu energy consumption substantially, it is equivalent to the energy consumption of 591 000 European families.

In response to a significant consumption of energy, Outokumpu has assigned priority to issues of efficiency and can demonstrate best-in-class efficiency in terms of energy use. The objectives related to energy, Outokumpu will include not only the actual reduction of energy consumption, but also production efficiency, as emissions are calculated per tonne of stainless steel. In the future Outokumpu set goals to increase overall energy efficiency by 5%. Implemented fully, this would be equivalent to 250 GWh of annual energy savings..

**Insights.** The European experience shows us examples of the use of new innovative solutions in the management of energy efficiency and data in the field of sustainable development. The main advantage of such solutions is the ability to track data to effectively manage energy efficiency and to integrate these issues into the process of making business decisions.