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## **POWER SURVEY – BASIS OF ENERGY SAVING**

In the North region of Russia the efficient use of energy is given special attention. In 1996 an agreement was signed between Norway and Russia on cooperation in the field of energy efficiency areas: organization and development of energy efficiency demonstration zones, creation of energy efficiency, the implementation of energy efficiency projects, training and information activities, the development of Russian-Norwegian trade and the development of financial mechanisms for energy efficiency projects. Russian-Norwegian cooperation in the field of energy conservation in Northwest Russia received intensive development in Kirovsk of Murmansk region. In 1997 Expert Group of Power has developed a plan of action to improve the energy situation in the Barents Sea region. Priority in this regard was given to the effectiveness of all components of the energy system - production, distribution and consumption of energy in the Barents Sea region. Cooperation to improve the energy situation in the Barents Region is organized in the following areas: the development of energy projects; methodological and information support; facilitating the transfer of energy technologies; improving the investment climate in the energy sector; effective organizational solutions aimed at the development of cooperation. Energy inspection - is a set of technical, organizational, economic activities aimed at identifying possible cost-effective optimizing the consumption of energy resources. To achieve this goal, the following objectives: the development of energy certificates; estimate of the share of energy in production costs; identification of priority areas of energy conservation; evaluation of energy saving potential in selected areas; examination of energy efficiency innovations ongoing or planned at the site audit; development of proposals for the organization of the energy management system; development of effective measures for the implementation of the identified potential energy savings; development of an energy efficiency program object. It should be noted that the energy audit - the first stage of energy efficiency, whose main task - identification, technical and economic feasibility of the spectrum of energy saving measures. Demands of the market and the state to the content of energy audits and energy auditors are constantly increasing. Since 2010, energy audits may engage in both legal and natural persons who are in a self-regulatory organization (SRO) in the field of energy audit. The next step is performed the identified energy efficiency measures, which includes the following items: engineering, project management, implementation of activities, control over the delivery of energy-saving equipment, training, construction documentation, energy management, monitoring, help to maintain energy-saving equipment. The last step is the definition of routine personnel serving energy-saving equipment and technical systems. On the basis of an energy

audit, which was conducted jointly with the Norwegian energy group under social Kirovsk, defined amounts of energy saving in the range of 30 - 45 %. To create a methodological tool in justifying management decisions on energy efficiency in enterprises is necessary to implement information-modeling systems to analyze energy consumption, the construction of which should be based on the concept of unity methodology, software, information, technical and organizational support. The project ENERU ( Kolarctic program - a program European Instrument for cooperation and partnership) in order to increase the effective energy management in the Barents Region is working to establish a network of business cooperation involving companies, municipalities, educational and scientific institutions in the Barents region. Cooperation model, created by the project is based on the concept of the triple helix, which is a reflection of the new economic processes: knowledge economy; globalization; integration activities of states and corporations; new means of communication and technology; network forms of organization. Technological breakthrough Scandinavian countries shows us that the main condition here is a fruitful cooperation between business, science and the state at all levels - local, national, international. The advantage of the Murmansk region as part of the Barents region is the geographical position, promoting the natural relations between the northern territories of the Scandinavian countries and Russia. It is therefore important to examine how the Scandinavian experience can be adapted to the economy in the Russian context. As a result of the implementation of energy saving measures action plan to improve the energy situation in the Barents Region, the power must provide reliable, efficient and environmentally sustainable energy supply, which is the basis for economic and social development of the region.

#### REFERENCES

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