

Quality, environmental and energy management system as a tool for improving university management



Keywords: sustainability, environmental management system, ISO 14001, ISO 50001 energy management system



Sub-point of results and discussions

The implementation of an integrated quality, environment and energy management system based on global standards PN-EN ISO 9001:2015, PN-EN ISO 14001:2015, PN-EN ISO 50001:2018

Stages	Description
Recognition of the scope of necessary work at the level of individual processes and areas of activity	Assessment of the alignment of existing documentation of the integrated quality, environment and energy management system
Training of teaching and administrative staff at UAS in Nysa	clarification of the standard's requirements for quality, environmental and energy management
Identification of internal processes at UAS in Nysa	necessary for the operation of the integrated quality, environment and energy management system - development of a process map
Development of partial system documentation of the integrated system at UAS in Nysa	meetings with designated individuals (or teams) to develop relevant elements of the quality management system (creation of documented procedures, process descriptions) - developing documentation. Special attention dedicated to the principles of of documentation supervision and records to facilitate the flow of information and improve the efficiency of communication
Development of integrated system documentation at UAS in Nysa	comprehensive documentation Development (quality book, procedures, other documents required by the standard and required by the internally established information flow system, determination of ways to measure the effectiveness/efficiency of individual processes)
Implementation of an integrated quality, environment and energy management system based on the requirements	Implementation of the developed documentation of PN-EN ISO 9001:2015, PN-EN ISO 14001:2015, PN-EN ISO 50001:2018 standards at UAS in Nysa
Internal audits at UAS in Nysa PN-EN ISO 9001:2015, PN-EN ISO 14001:2015, PN-EN ISO 50001:2018 standards	Implementation of internal audits with their full reporting and possible initiation of corrective and preventive actions in accordance with the requirements
Supervising preventive corrective actions at UAS in Nysa	Supervising the effects of the first internal audits and post-audit corrective and preventive actions
Confirmation of effectiveness of corrective and preventive actions at UAS in Nysa	Confirmation of the effectiveness of corrective and preventive actions carried out, follow-up audits

Conducting a review of the integrated quality, environment and energy

Comprehensive arrangements with the certification body before the

Preparation of documentation for the first records and transfer of data

management system based on the requirements of

In terms of quality management (ISO 9001):

- ➤Systematic development and continuous improvement of qualifications of all scientific and teaching, administrative personnel, increase their involvement in the tasks performed;
- ⇒increase efficiency in the identified main processes of the university such as: the process of implementation of didactics, the process of scientific and research activities and the process of implementation of services to the market
- >conduct systematic audits and reviews of the system and implement corrective and preventive actions when auditing all internal processes;
- >Improving the organization of work, within the timeframes specified by law and internal acts;
- ➤Gathering and using knowledge about the needs and expectations of students and other stakeholders;
- ⇒improving the conditions of service to students in faculty deaneries;

In terms of environmental management (ISO 14001):

- >improving environmental performance in terms of environmental protection;
- >achieving measurable environmental goals by setting environmental aspects;
- >creating environmental awareness among students, employees, visitors and other stakeholders
- monitoring the effectiveness of the Environmental Management System by analyzing the achievement of the environmental objectives set for each environmental aspect;
- >proper management of water and wastewater at the university;
- ⇒identifying, analyzing and evaluating risks related to environmental aspects, the implementation of, for example, the environmental protection program or the implementation of the waste management plan;
- >professionalization of climate and air quality protection, minimization of noise pollution;
- >proper water management and water and wastewater management;
- >proper waste management and waste prevention;

In terms of energy management (ISO 50001):

- ➤Improving the energy performance of the State University of Applied Sciences in Nysa and its continuous improvement by reducing unit energy consumption;
- ➤Supporting the purchase of projects for modern solutions that reduce the university's total energy demand;
- ⇒optimizing the consumption of energy carriers by conducting periodic inspections of machinery and equipment that reduce the demand for energy carriers at the university;

INTRODUCTION

- 1. key issues related to the activities of the University of Applied Sciences in Nysa in the
- context of the implementation of its strategy
- 2. promotion of pro-environmental attitudes among employees, students, and other stakeholders
- 3. the stages of implementing an integrated quality, environmental, and energy management system based on the requirements of ISO 9001, ISO 14001, and ISO 50001
- 4. key milestones and the results obtained in terms of environmental protection and measurable environmental and energy goals, with special emphasis on the context of proper water, wastewater, and waste management.
- 5. the role of the energy management system, the main objective of which is to optimize the consumption of energy carriers in the context of increasing the share of energy management obtained from renewable energy sources.

Table No. 1 Stages of development and implementation of the Integrated Quality, Environment and Energy Management System at the UAS in Nysa

certification audit

expected by the audit team

Management review at UAS in

certification body at UAS in Nysa

Conducting a certification audit at

Direct contact with the

Nysa

UAS in Nysa