

ENERGY EFFICIENCY IN WATER AND WASTEWATER UTILITIES

Course description

Many water and wastewater utilities have energy costs that account for 30-40% of the direct operating costs. This training course provides a general methodology to help utilities self-assess the energy efficiency for each component of their water and wastewater systems and plants.

This training course addresses the implementation of the energy audit program through some stages to determine where and how much energy is used in the system, the level of the efficiency, specific measures to implement to reduce the consumption and cost, the cost benefit or cost-effectiveness of such actions, and methods to evaluate and monitor results.



Participants will gain the necessary skills and knowledge to perform the energy audit of system components.

Target Group

This training course has been developed for professionals of water supply and sewerage utilities, and is especially useful for managers and technical staff responsible for the operations and maintenance of drinking water and wastewater treatment plant and pumps stations.

Objectives of the Training Course

At the end of this training course, the participants will be able to:

- Recognize the importance of applying an energy efficiency program;
- Identify the basic data necessary to perform an energy audit;
- Apply electrical and hydraulic measurement for your utility;
- Calculate energy losses in electrical conductors and transformers, electrical motor efficiency, pump efficiency, head losses in piping, and leaks in water network;
- Analyse energy indicators based on historic data;
- Recognize how to improve efficiency of electric motors or pumps operations;
- Recognize the importance of using renewable energies.

Training Method

The training is based on lectures presented in PowerPoint combined with discussions and case studies. In addition to lectures and discussions, participants will analyse specific case studies.

Training Course Material

The participants of this training course will be provided with the Training Manual "Energy Efficiency in Water and Wastewater Utilities". In addition, the participants will receive certificate of attendance.

Registration fee

Members of SHUKALB/SHUKOS: 22,000 ALL/person
Non-members: 25,000 ALL/person.

This fee includes course materials, coffee and lunch breaks.