

**Course Title:** Energy Management in Drinking Water Systems

**Contact Hours:** 7

**CEU Value:** 0.7

**Course Description:**

This course is designed to provide participants with the understanding and importance of Energy Management Planning and Energy Audits and provide practical approaches for reducing energy usage and costs while mitigating impacts of climate change.

*Areas of study include:*

- Review challenges in managing Drinking Water Systems and issues related to Energy Management
- Systematic approach and benefits for energy management
- Review barriers to energy management
- Understand risks arising from lack of energy management
- Risks identification, characterization and communication
- Develop a strategy to address energy management issues
- Seven steps for Energy Management Planning
- Seven steps for reducing energy costs
- Understand how you are billed, including Time-of-Use Pricing
- Review Practical approaches for Energy Management
- Alternative treatment strategies from energy consumption standpoint
- Water conservation programs
- Calculation of energy savings due to water conservation
- What is renewable energy?
- Types and considerations for renewable energy generation
- Understand what is an Energy Audit
- How to conduct an Energy Audit and prepare Energy Management Plans
- Benefits of Energy Audits
- Impacts of climate change on water utilities
- Action plan to deal with climate change

**Target Audience:**

Municipal utility staff who are involved in energy management planning and energy reduction, government officials responsible for water management and conservation programs, operators of water treatment plants, designers and managers of water plants, plant inspectors and compliance officers, product suppliers and manufacturers, students, academics, and research groups.