

Master Thesis Brief Description

Thesis Title	Development of an Energy Management System for the Electromechanical Service Department Ministry of Communication and Works, Based on ISO50001:2011
Programme of Studies	MSc in Engineering Management
Course	MEM 590 Master Thesis
Area of Study	Energy Management
Student's Name	Christos Efthyvoulou
Students Reg. Number	6943
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christoforos Charalambous, Assoc. Professor, Computer Science Department Dr. Christos Anastasiou, Ass. Professor, Civil Engineering Department
Semester	Fall Semester 2012
Short Description	<p>In July 2011, the International Organization for Standardization (ISO) released ISO 50001, Energy Management Systems – Requirements with guidance for use. This standard advocates continuous improvement of energy performance and provides requirements for an energy management system (EnMS) to achieve this continuous improvement.</p> <p>The purpose of this study focused on the examination of the implementation of a pilot EnMS in the buildings of Electromechanical services Department in Nicosia. The case was to develop an EnMS for the building and select performance improvement measures. Specifically, the role of the EnMS in revealing efficiency opportunities in the building was discussed. The energy planning process required by the EnMS, initiated by top management, was also developed. The planning process drove data collection and analysis of energy use and consumption. This included the development of energy base lines which were used in conjunction with Energy Performance Indicators.</p>