

Master Thesis Brief Description

Thesis Title	Energy Audit of a Poultry Farm
Programme of Studies	MSc in Energy Systems and the Built Environment
Course	MES 580 Master Thesis
Area of Study	Computational Building Physics – Whole Building Energy Analysis
Student's Name	Iro Andreou
Students Reg. Number	9942
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. George Karagiorgis, Assoc. Professor, Mechanical Engineering Department Dr. Byron Ioannou, Ass. Professor, Architectural Department
Semester	Spring Semester 2016
Short Description	<p>The rapid increase in energy consumption over the past years has led to greater efforts to save energy. One of the most important energy consumers at Europe as well as at national level for Cyprus, is the building sector and in particular the low energy performance of the existing buildings. This master thesis concerns the energy audit of a poultry farm in the province of Nicosia. The audit evaluates factors that affect the energy performance of the building, such as the construction materials that was used for building envelope, the existing energy consumption breakdown, systems as the cooling / heating / air-conditioning, the lighting system and others with the purpose to propose technical proposals for energy and cost savings as well as energy efficiency improvement.</p> <p>Finally, for each of the proposed interventions, a techno –economic survey was carried out and in order to be able to exam whether the proposed intervention for improving the energy behaviour of the building, will be economically and energy-conscious. The results of this diploma thesis were used by ANDREAS BLAKIS (Poultry Farming Enterprises) Ltd for future energy upgrades of the building.</p>