

Master Thesis Brief Description

Thesis Title	Pre Engineering of a Comprehensive System for Building Heating by Exploiting Geothermal Energy
Programme of Studies	MSc in Sustainable Energy Systems
Course	SES 515 Capstone Project I
Area of Study	Sustainable Energy Technologies
Student's Name	Konstantinos Kanellos
Students Reg. Number	11500068
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Frederick University
Supervisory Committee	Dr. Agis Papadopoulos, Professor, Aristotle University Thessaloniki Dr. George Karagiorgis, Assoc. Professor, Frederick University
Semester	Fall Semester 2015
Short Description	The purpose of this project was the pre-engineering of a low grade geothermal heating system to be exploited for an industrial dairy unit. The major steps of a renewable energy pre-engineering project were implemented, including the definition of the geothermal potential in selected locations in Greece, the available technologies of low grade geothermal energy exploitation, as well as the pre-design of the selected system. Aspects concerning the assessment of the environmental and the financial aspects of the selected systems were also implemented.