

UTILIZATION OF THERMAL ENERGY  
GENERATION FROM WASTE MATERIALS

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PROJECT REPORT

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

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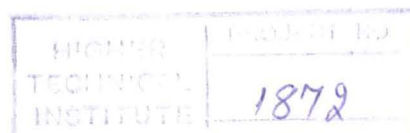
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This project is devoted with all my love to my parents.

## SUMMARY

### Utilization of Thermal Energy Generation from Waste Materials

by Elisseou Christodoulos (3M1)

The objectives of the present study were:

1. The appreciation of the importance of energy conservation by utilizing the energy generated from waste materials.
2. The investigation of the types and quantities of waste materials available in Cyprus (wood residues).
3. The estimation of their energy content.
4. The proposal of methods for the utilization of the thermal energy generated from waste materials.
5. To carry out an economic feasibility of the energy conservation methods proposed.

A condition requested was that special attention should be given to a pollution free environment.

The approach followed to carry out this study was separated into two parts:

1. Desk research.
2. Field research, which was executed by personal contact with several competents using mostly the interview method.

Then, all collected data was classified and analyzed and conclusions were extracted.

The general conclusion of the first part of the project whose aim was to identify the Need, supports that a trial for the utilizing of thermal energy generation from waste materials appears as a serious solution.

The final conclusion of the whole project stated that the best method of utilizing the waste materials (wood residues) is their use by the Cyprus Forest Industries for:

- a. the construction of chipboards, and
- b. the generation of thermal energy from their remainders (wood dust) through a specific burner.

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