HIGHER TECHNICAL INSTITUTE

MECHANICAL ENGINEERING COURSE

DIPLOMA PROJECT

ENERGY CONSERVATION STRATEGIES IN AN INTENSIVE INDUSTRY

KATSARIS PANICOS

M/698

JUNE 1994

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DEDICATION

This study is dedicated to my family

especially to my brother

KATSARIS ANTONIS

who both help me a lot

during the three years at

H.T.I.

ENERGY CONSERVATION STRATEGIES IN AN ENGERGY INTENCIVE INDUSTRY

BY

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ABSTRACT

This project as the name implies deals with energy conservation in a "Tobacco Industry". It examines in depth where energy is produced and in what areas and how much is wasted. Also methods are suggested by which energy can be saved.

In Chapter 1. The complete production line is presented.

In Chapter 2. The various energy processes are presented.

In Chapter 3. Deals with energy auditing.

In Chapter 4. Some energy conservation methods are suggested and some recommendations in order to save energy in various areas.

INTRODUCTION

Conservation, an unconventional source of energy. A source of energy that should be regarded as untapped. The major alternative to imported light fuel oil is either coal nor geothermal energy but conservation.

Conservation does not require technological advancements and breakthroughs. Furthermore decissions to conserve unlike decisions to produce energy, hence to be made by thousands of often poorly informed people.

A person can pick up a glass of oil and say "this is a glass of oil". Conservation is a little more difficult to understand. It can be the design of more efficient engines, refigerators and ovens, the discontinuation of energy supply to less efficient equipment or the changing of the methods of employment of energy.

Once people understands the importance and definition of conservation of energy and tries to use the best ways so less waste of energy we will automatically have an increase in the economy of the whole country.

The Tobacco industry uses a quite large percentages of electricity and light fuel oil, which are the main sources of energy, is therefore essential that the industry should be confronted with their collective responsibility to make better use of those energy resources which from now on, will be in shorter supply and will lose more than before.

At the end we are going to come in the conclusion that the best choice is to try to save energy from the various areas thus avoiding facing greater problems in long term.