HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING COURSE

DIPLOMA PROJECT

SOLAR PHOTOVOLTAIC SYSTEMS

E1322

BY

TZIAKOURIS KYPROS

JUNE 2003

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Project Report submitted by:

Tziakouris Kypros

In part of satisfaction to the conditions foe the award of diploma Technical Engineering in Electrical Engineering of the Higher Technical Institute, Cyprus.

Project Supervisor: Dr C. Marouchos

Lecturer in Electrical Engineering H.T.I

Type of Project: Individual

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INDRODUCTION

The main objective of this project is to investigate and present a real photovoltaic system and overview the prospect ivies that such a system has in Cyprus.

In order to fulfill the objectives the following approach was followed.

- A briefly description of the benefits and types of renewable energy
- Analysis of solar, photovoltaic, energy – solar radiation, photovoltaic panels.
- The performance characteristic of each component use in PV systems – inverters, batteries.
- Presentation of real systems, including an economical investigation to see if PV systems are economical feasible in Cyprus.

The project offers practically any information a person may need about photovoltaic systems. There are documents, pictures, drawings, manufactures specifications and even EAC regulations that allow the reader to get a complete picture of a photovoltaic system.