



# Feasibility of Using Solar Photovoltaic Systems at Egyptian Airports

By

### Mahmoud Fekry Ali Mostafa

A Thesis Submitted to the
Faculty of Engineering at Cairo University
in Partial Fulfillment of the
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MASTER OF SCIENC

In

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Under the Supervision of

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Faculty of Engineering
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#### **Title of Thesis:**

#### Feasibility of Using Solar Photovoltaic Systems at Egyptian Airports

#### **Key words:**

Airports, photovoltaic systems, feasibility study, risk assessment, airport safety.

#### **Summary:**

In this MSc thesis the possibility of using solar photovoltaic systems at Egyptian airports is presented and discussed. The emerging safety concerns related to the installation of large-scale PV systems at airports are demonstrated with using risk assessment matrices. A pre-feasibility study for using a PV system at some Egyptian airports are demonstrated with the results which indicate that the Egyptian airports can play an effective role in producing renewable energy through the use of solar PV systems.



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