

EXECUTIVE SUMMARY

This report represents the results of the comprehensive energy audit study carried out at Jordan Ceramics Co., Zarka from June 2, 2003 till August 10, 2003 by the National Energy Research Center (NERC).

The study focused on the following major energy consuming areas in the plant to identify energy conservation opportunities:

- Electrical system
- Kilns
- Chillers
- Compressed Air System
- Lighting System
- Energy Management
- Electric Motors

The detailed energy audit (DEA) team would like to express their gratitude and appreciation for all of management and employees who facilitated and assisted in conducting the DEA especially to Mr. Fathi Hyasat the General Manager and to Eng. Marwan Al-Dabas. Also our gratitude goes to Dr. Ibrahim Moho for his continuous support and technical contribution.

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This section presents a summary of energy conservation projects proposed for implementation and contained in the main report.

It is estimated that JD 123123 a year can be saved through implementing the identified and reported projects

The investment required totals about JD 208227, which needs to be paid to implement all proposed projects. The total pay back period is less than two years.

Also it is worth mentioning that 3326 tons of CO₂ emission reduction annually is achieved with the implementation of the energy conservation measures. CO₂ emission reduction was estimated based on the following figures:

Calorific value of fuel	10000 kcal/Kg
1 Kg of fuel emits	3.08 Kg CO ₂
Electricity generating efficiency	38%