



International Journal on Recent Researches In Science, Engineering & Technology

(Division of Mechanical Engineering)

A Journal Established in early 2000 as National journal and upgraded to International journal in 2013 and is in existence for the last 10 years. It is run by Retired Professors from NIT, Trichy. It is an absolutely free (No processing charges, No publishing charges etc) Journal Indexed in JIR, DIIF and SJIF.

Research Paper

Available online at: www.jrrset.com

ISSN (Print) : 2347-6729

ISSN (Online) : 2348-3105

Volume 4, Issue 2, Feb.
2016.

JIR IF : 2.54

DIIF IF : 1.46

SJIF IF : 1.329

Energy Analysis Of A Solar-Cooled House In Amman

Mutaz Elayyan ^a, Mamdoh AL_ Busoul AND ^b

^a Al-Balqa' Applied University , Faculty of Engineering technology ,
PO Box 15008, Amman11134, JORDAN.
mutazalayan@gmail.com.

^b Al-Balqa' Applied University , Faculty of Engineering technology ,
PO Box 15008, Amman11134, JORDAN.
m_al_busoul@yahoo.com.

Abstract:- The use of solar power is becoming more feasible these days, and more applications are being operated using it instead of conventional sources of energy. One of the promising and the important applications is solar cooling. Where in this paper the financial feasibility of using solar absorber chillers instead of diesel and LPG absorber chillers for low load spaces is investigated. The space is a conventional house in Amman where, the results show a promising payback period if the interest rates were low and with long operation of the cooling system. The results reached around 6 years as the minimum value, but the payback period becomes very high for high interest rate and short daily operation reaching values of 20 years or more.