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Faculty of Engineering
Engineering Project Management
Graduate Studies

Sustainability and Feasibility Management for
Residential Buildings Design in Jordan
(Case Study)

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Authorization

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List of Abbreviations

Abbreviations	Meaning
AC	Alternating current
ICFL	Install Compact fluorescent light
DC	Direct current
HVAC	Heating , ventilation ,Air Conditioning
KWH	Kilowatt-hour
PV	Photovoltaic Solar cell
TFPV	Thin-film photovoltaic cells
TFSC	Thin-film solar cells
USGBC	United states Green Building Concil
LEED	Leadership in Energy and Environment Design
CIB	Council Of Research And Innovation In Building
IRIS	Institute For Research And Innovation In Sustainability
BTU	British Thermal Unit
SEER	Seasonal Energy Efficient Ratio
SC	Sheding Cofficent

ABSTRACT

***“Sustainability and Feasibility Management for
Residential Buildings in Jordan”***

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The residence sector is one of the most developed sectors in Jordan but its development growth is uncontrolled sustainably specially the energy sustainability and its important to control it because Jordan is one of the high energy consuming countries in the middle east and its increasing yearly. So in this research I did introduce a new technologies to use Like renewable energy source, wall insulation material, E-low windows, and lights type to achieve a lower and more efficient use of energy, and then to find if these technologies are feasible to use or not. And the studies by this research resulted that when using a solar energy system, PVF insulation material, Double E-low glass, and LED lighting it reduces the consumed energy more than 90%. So, its recommended to use these technologies to save energy and for cleaner environment.