

أثر الطاقة السلبية للشمس على التصميم الداخلي للمسكن بالمجتمعات العمرانية الحديثه
في جمهوريه مصر العربيه

**The impact of using Passive solar energy upon the housing interior design
in modern urban societies In the Republic of Egypt**

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• **Research Summary :**

Most countries in the world have increased the use of conventional energy, which is produced using conventional fuels such as oil, gas, coal or nuclear power. These sources greatly increase pollution of the environment, producing carbon dioxide, which contributes to increasing the temperature of the atmosphere around the globe. It was necessary to search for clean sources of energy and to move more towards the rationalization of the use of oil emitting emissions and towards the reliance on the use of renewable energies and clean. The greater the role of renewable energies as a major source of energy, the sooner the better, and the excessive consumption of non-renewable traditional sources of energy and their systems that threaten the global order of our world.

There is a steady increase in the initiatives of solar energy cities to pay attention to studies and projects related to these initiatives to reduce carbon dioxide emissions and to emphasize the use of the principles of sustainable development and sustainable development through existing and future urban communities. On this basis, consideration of planning, environmental and urban considerations as well as binding laws is one of the most important factors to achieve such goals.

On this basis, the research message was formed to discuss the role of negative solar energy as one of the renewable energies in urban development as one of the effective ways to develop new and generally sustainable urban communities. And enrich the human rights to understand and take into account the environmental factors surrounding it and maintain its sustainability in light of its needs for development and reconstruction.

Therefore, the role of the research mission is to study, update and monitor the current efforts and information on the systems of solar energy utilization in urban development, and thus evaluate the possibility of using these applications and systems through the Egyptian urban development trends during the medium and long term towards the development of new communities on land representing 95% of The area of Egypt is not exploited efficiently because most of them are desert land.

• **Key words :**

Sustainability - Green Architecture - The role of solar energy in urban development - Passive Heating and Cooling By Solar Energy