Solar Hot Air Generator Construction and Applicability

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The evolution of the human civilization requires increasing energy consumption. The contemporary energy supply systems were developed mainly on fossil fuels and nuclear energy, but these are limited and polluting. Life on Earth is maintained by the solar energy, which is non-polluting and exhaustless.This is a possible solution to provide the necessary energy for our consumption. The hot air generator uses solar energy to heat any enclosure (living room, industrial hall, drying room etc.). Such devices can be easily built with reusable materials and relatively low costs. This study presents a specific model for which were made efficiency analysis in various condition. The global applicability study shows that it can be used in all inhabited ares of the Earth. For the research of the applicability there were used parameters of a common insulated house room to calculate the heat losses (or the energy need) and also there were studied the effects of reduction on the pollution generated during house heating or industrial heating. Considering the economical aspect, the need of energy and the protection of the environment this kind of solar generator represents an important sustainable solution for our heating energy needs.

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