Sustainable design in housing architecture of Uzbekistan

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Buildings are responsible for approximately 40% of the total world annual energy consumption. Most of this energy is for the provision of heating, cooling and lighting. With an increase in economic and industrial activities the demand for energy is also rising. The increased production and consumption of energy entail higher levels of pollution and eventually climate change, with possible disastrous consequences. Increasing awareness of the environmental impact of dioxide carbon emissions caused the renewed interest in environmentally friendly technologies. The use of renewable energy sources and the rational use of energy are the fundamental imputes for any responsible energy policies. The use of renewable non-commercial energy resources became widespread in housing sector of many countries with limited resources of commercial energy. The understanding and identification of climatic influence at the buildings is one of the most important part of design process. An approach is needed to integrate renewable energies in building design in a way to meet high building performance. Passive design technologies can help architects create low energy environments in housing architecture of Uzbekistan according to its suitable climate and natural conditions. These technologies can form a suitable approach to the environmental aspects and essential life values that has been lost in recent years.

Biography
Orif Khaitov is a PhD student at Samarkand State Architectural and Civil Engineering Institute. He completed his Master of Science degree in 2009 from Samarkand State Architectural and Civil Engineering Institute. Since that time, he is developing his investigations on sustainable energies for sustainable growth of housing architecture of Uzbekistan.

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