## Insulation and Architectural Design to Have Sustainable Buildings in Iran

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**Abstract:** Nowadays according to increasing the population all around the world, consuming of fossil fuels increased dramatically. Many believe that most of the atmospheric pollution comes by using fossil fuels. The process of natural sources entering cities shows one of the large challenges in consumption sources management. Nowadays, everyone considered about the consumption of fossil fuels and also Reduction of consumption civil energy in megacities that play a key role in solving serious problems such as air pollution, producing greenhouse gasses, global warming and damage ozone layer. In the construction industry, we should use the materials with the lowest need to energy for making and carrying them, and also the materials which need the lowest energy and expenses to recycling. In this way, the kind of usage material, the way of processing, regional materials and the adaptation with the environment is critical. Otherwise, the isolation should be use and mention in the long term. Accordingly, in this article we investigates the new ways in order to reduce environmental pollution and save more energy by using materials that are not harmful to the environment, fully insulated materials in buildings, sustainable and diversified buildings, suitable urban design and using solar energy more efficiently in order to reduce energy consumption.

**Keywords:** building design, construction masonry, insulation, sustainable construction

Conference Title: ICACE 2015: International Conference on Architectural and Civil Engineering

**Conference Location :** Los Angeles, United States **Conference Dates :** September 28-29, 2015