

## Investigating a Model for Constructing Sustainable City Based on Green Architecture and New Technologies

Somayeh Eidian<sup>1</sup>

### Abstract

Idealism is one of the main characteristics of human beings and the main motivator in their lives. By knowing human beings and their needs, the desired architecture could be achieved in order to achieve energy sustainability and clean energy production, energy saving, reduction of environmental degradation, the desired urban appearance and reduction of air pollution. Through modern designs, modern technologies, green architecture and equipped with new and intelligent infrastructures, it is possible to improve the common patterns of construction and transportation in order to improve the quality of life by creating a favorable environment, and by having green buildings, sustainable and intelligent Sustainable urban planning and a sustainable and ideal city arrived in the future. The present research method is based on mixed analysis method. In order to identify the factors affecting the construction of a sustainable and ideal city, while reviewing the concepts presented in the theoretical literature, including theoretical foundations and research background, combining the findings of library studies and conducting initial interviews with 13 experts in the field of urban planning, architecture and civil engineering effect on building a sustainable and ideal city for sustainable development has been identified. These characterizations were performed in 3 rounds by Delphi research method and 5 factors were obtained. Then, in order to identify the priority of effectiveness, 384 questionnaires were completed among the members of the Engineering System Organization and the data were analyzed by hierarchical research method. In order to confirm the results, hypotheses were tested using inferential analysis method and the effect of factors on sustainable development were confirmed. The results showed that in order to achieve the construction of a sustainable and ideal city using green architecture and new construction technologies, the factors of buildings, transportation, parks and green spaces, urban design and new technologies must be addressed, respectively and Finally, by considering for these factors in planning, effective steps can be taken towards the development and construction of a sustainable and ideal city.

**Keywords:** Sustainable City, Green Architecture, New Construction Technologies.

---

1- MSc of Project Management and Construction, Department of Project Management and Construction, Alaodoleh Semnani Education Institute of Semnan, Garmsar, Iran. (E-mail: eidian.arc@gmail.com)