



Journal of Contemporary Urban Affairs

2022, Volume 6, Number 2, pages 193-205

Original scientific paper

A Proposal to Mitigate Energy Consumption through the Sustainable Design Process in Tunis

*1 Assoc. Prof. Safa Achour Younsi (D) (SC), 2 Dr. Athar Chabchoub (D) (SC), 3 Dr. Nour El Houda Jouini (D) (SC), 4 Professor Fakher Kharrat (D) (D) (SC)

1.2.3 & 4 LaRPA, Carthage University, National School of architecture and urbanism, Tunis, Tunisia
1 E-mail: safa.achouryounsi@enau.ucar.tn , 2 E-mail: athar.chabchoub@enau.ucar.tn
3 E-mail: nourelhoudajouini@gmail.com , 4 E-mail: fakher.kharrat@enau.ucar.tn

ARTICLE INFO:

Article History:

Received: 12 June 2022 Revised: 26 August 2022 Accepted: 5 September 2022 Available online: 18 September 2022

Keywords:

Energy consumption; Thermal comfort; Built environment; Sustainable design process; Urban design; Numerical simulations.

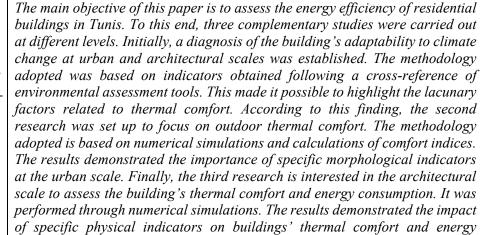
This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution 4.0 International (CC BY 4.0)



Publisher's Note:

Journal of Contemporary Urban Affairs stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.

ABSTRACT



behavior. Ultimately, this research highlighted the gap factors in urban and architectural design in Tunis. It detected the most significant physical and

JOURNAL OF CONTEMPORARY URBAN AFFAIRS (2022), *6*(2), 193-205. https://doi.org/10.25034/ijcua.2022.v6n2-6

morphological indicators to be considered for sustainable urban design.

www.ijcua.com

Copyright © 2022 by Achour-Younsi, S., Chabchoub, A., Jouini, N. E. H., Kharrat, F.

1. Introduction

The climate writes the history of peoples and civilizations, it influences our way of being, our way of life, our cities, and our homes (Song & Ye, C., 2017). Men have always been in harmony with their climate and ecosystem until the industrial revolution when this balance was broken, and nature was challenged (Goudie, 2018). The population explosion and pollution have caused unprecedented global warming. Indeed, during this decade, all countries recorded exceptionally high temperatures never experienced before

(Carter, et al., 2015) This global warming is increasingly felt and threatens the environment in various aspects: depletion of energy, food, hydraulic resources, and pollution (Viguié, 2020; Wang, Chen, & Ren, 2011). In August 2021, the Intergovernmental Panel on Climate Change published a report focusing on the state of

*Corresponding Author:

LaRPA, Carthage University, National School of architecture and urbanism, Tunis, Tunisia

Email address: safa.achouryounsi@enau.ucar.tn

How to cite this article: