Science Proceedings Series (SPS)
Journal Homepage: https://readersinsight.net/SPS
9th ASIA International Multidisciplinary Conference (AIMC-2025), Songkhla, Thailand

Analysis of Sustainable City Characteristics in Indonesia with Environmental, Social and Economic Approach

Retno Ayu Cahyaningrum[1]

Industrial Engineering
University of Indonesia, Depok
Indonesia
retnoayu.cahyaningrum@gmail.com

Rahmat Nurcahyo[2]*

Industrial Engineering
University of Indonesia, Depok
Indonesia
rahmat@eng.ui.ac.id

Ardhy Lazuardy[3]

Industrial Engineering
University of Indonesia, Gunadarma University, Depok
Indonesia
ardhylazuardy@gmail.com

Farizal[4]

Industrial Engineering
University of Indonesia, Depok
Indonesia
farizal@ie.ui.ac.id

***Corresponding Author email: rahmat@eng.ui.ac.id**

Submitted: 13 June 2025 *Revised: 31 August 2025* *Accepted: 10 September 2025*

Peer-review under responsibility of 9th ASIA International Multidisciplinary Conference (Songkhla, Thailand) Scientific Committee
http://connectingasia.org/scientific-committee/
© 2025 Published by Readers Insight Publisher,
Office # 6, First Floor, A & K Plaza, Near D Watson, F-10 Markaz, Islamabad. Pakistan,
editor@readersinsight.net
This is an open access article under the CC BY license (http://creativecommons.org/licenses/4.0/).

https://doi.org/10.31580/eq0db098
© 2025 The Authors. Published by Readers Insight Publisher. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/)

A B S T R A C T

Rapid urbanization in Indonesian cities such as Jakarta, Yogyakarta, and Bandung has led to increased population concentrations and a range of urban challenges. While numerous studies have explored sustainable city frameworks, limited research has examined the interdependencies among sustainability factors within the Indonesian context. This study addresses that gap by identifying key sustainable city characteristics that significantly influence urban development in Indonesia. A comprehensive literature review revealed 32 sustainability characteristics spanning environmental, social, and economic dimensions. These were then validated through a survey of eight urban planning experts from leading Indonesian universities using the Content Validity Index (CVI) method. The results indicate that 18 characteristics are critical to achieving urban sustainability. These findings highlight the importance of integrated policy interventions that focus on these validated characteristics to effectively address urban challenges. This study offers actionable recommendations for policymakers and urban planners to support the development of targeted, data-driven strategies for sustainable city implementation in Indonesia.

Keywords: *High Population; Sustainable City; Urbanization; Urban Planning*