

ICS 13.020.20
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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 43235-2023

**Comprehensive assessment index and method for urban
ecosystem**

城市生态系统综合评估指标体系及计算方法

Issued on: September 7, 2023

Implemented on: January 1, 2024

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents" Drafting. Please note that some content in this document may be subject to patents. The publisher of this document assumes no responsibility for identifying patents. This document is proposed and coordinated by the National Environmental Management Standardization Technical Committee (SAC/TC207). This document was drafted by: Ecological Environment Research Center of the Chinese Academy of Sciences, Beijing Institute of Space Mechanical and Electrical Engineering, Shanxi Provincial Ecological Environment Planning and Technology Research Institute, China Power Construction Ecology and Environment Group Co., Ltd., China Power Construction Group East China Survey and Design Institute Co., Ltd., China Standardization Research Institute Research Institute, Chinese Academy of Environmental Sciences, Nanjing Institute of Environmental Sciences of the Ministry of Ecology and Environment, Glodon Technology Co., Ltd., China Water Pearl River Planning Survey and Design Co., Ltd., Beijing Construction Engineering Civil Engineering Co., Ltd., China Society of Technical Economics. The main drafters of this document. Ouyang Zhiyun, Han Baolong, Du Shixun, Xiao Yi, Shu Chengji, Zhang Lijia, Ren Yufen, Lu Fei, Xian Chaofan, Li Junjie, Xu Bingsheng, Chen Chenyu, Chen Zhiwen, Zhao Yu, Xu Chongbin, Zhang Yizhang, Xu Haigen, Zeng Limin, Song Zijian, Li Tianfei, Li Cui, Tang Jie, Tang Yingdong, Ling Yaozhong, Han Nini, Xin Liang, Li Xinjian, Huang Jianliang, Xiao Liang.

Cities are the main gathering space for human activities and are typical social-economic-natural composite ecosystems. Carry out evaluation of urban ecology Assessment not only needs to consider the characteristics of the natural ecosystem itself, but also needs to assess the interaction between humans and nature, including the efficiency of humans using nature, The benefits of nature to human beings. A scientific,

comprehensive and comprehensive assessment of urban ecological conditions is crucial to grasping the direction of urban sustainable development and It is of great significance to guide high-level urbanization construction in which humans and nature coexist harmoniously. This document constructs a comprehensive evaluation index system from five aspects. urban ecological pattern, structure, process, service, and resilience. Among them, pattern and structure The structure reflects the natural ecological conditions, and the processes, services and resilience reflect the degree of interaction between humans and nature. Use this document to develop urban ecology Systematic comprehensive assessment can not only provide comprehensive reference indicators for urban ecological management, but also provide special indicators for industry management. Comprehensive assessment indicators for urban ecosystems System and calculation method

1 Scope

GB/T 43235-2023 gives the indicator system and calculation method for the comprehensive assessment of urban ecosystems. Chinese cities are ranked and rewarded on ecological performance, and the rankings have been computed from whatever indicators each publisher chose - green coverage in one, air quality in another, none of them comparable, and all of them susceptible to a city improving the number without improving the ecosystem. A common indicator set with a defined calculation is what makes the comparison mean something. The standard sets the assessment principles, the assessment method, the indicator system, and the calculation method by which the indicators are normalised, weighted and combined into the overall result. It took effect on 1 January 2024.

This document provides an indicator system and technical methods for comprehensive assessment of urban ecosystems, including evaluation methods, indicator systems and calculation methods. etc. content. This document is suitable for guiding comprehensive assessment of urban ecosystems.

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, the dated quotations For undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to this document.

GB 3095 Ambient Air Quality Standard

GB 3096 Acoustic environment quality standard

GB 3838 Surface water environmental quality standards

GB/T 42340-2023 Ecosystem Assessment Ecosystem Pattern and Quality Assessment

Methods

3 Terms and definitions

The following terms and definitions apply to this document.

- 3.1 urban ecosystem urbanecosystem A functional whole formed by the interaction between urban residents, animals and plants living in the city, and the urban abiotic environment.
- 3.2 The spatial arrangement and combination of various sub-ecosystems in the urban ecosystem.
- 3.3 The combination characteristics of the type, quantity, quality and other attributes of trees, shrubs, grassland and other components in the urban ecosystem.
- 3.4 Various natural resources (water, energy, land, etc.) in the urban ecosystem participate in system evolution and serve the process of human production and life.
- 3.5 Benefits that urban ecosystems provide to humans.
- 3.6 The ability of urban ecosystems to withstand many ecological and environmental problems in cities.