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

GB/T 24489-2025

Replacing GB/T 24489-2009

**General principles for establishing energy efficiency
requirements of energy consuming products**

用能产品能效指标编制通则

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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. This document replaces GB/T 24489-2009 "General Rules for Compiling Energy Efficiency Indicators for Energy-Consuming Products". Compared with GB/T 24489-2009, except for the following. Aside from structural adjustments and editorial changes, the main technical changes are as follows:

- a) The definitions of "energy-consuming products" and "energy efficiency standards" have been revised, and the term "energy efficiency label" and its definition have been added (see Chapter 3, 2009). Chapter 2 of the 2008 edition);
- b) The classification has been changed (see Chapter 4, Chapter 3 of the 2009 edition);
- c) The content of "Energy Efficiency Standards" has been added (see Chapter 5);
- d) A "basis for compilation" has been added (see 6.1);
- e) The requirements have been changed (see 6.2, 4.1.1, 4.1.2, 4.2.2 of the 2009 version);
- f) The requirements for "Energy Efficiency Index Testing and Calculation Methods" have been changed (see Chapter 8, Chapter 5 of the 2009 edition);

g) Added "Energy Efficiency Standard Implementation Requirements" (see Chapter 9). Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the National Technical Committee on Standardization of Energy Infrastructure and Management (SAC/TC20). This document was drafted by: China National Institute of Standardization, Energy Research Institute of the National Development and Reform Commission, and Yunnan Power Grid Co., Ltd. Zhuhai Gree Electric Appliances Co., Ltd., Xi'an Jiaotong University, Yunnan Provincial Institute of

Standardization, State Power Investment Corporation Limited, China Automotive Technology and Research Center New Energy Technology Co., Ltd., Shanghai Jiao Tong University, Hangzhou Robam Appliances Co., Ltd., Hisense Visual Technology Co., Ltd., Midea Group Group Co., Ltd., Hebei Construction Investment Energy Science and Technology Research Institute Co., Ltd., China Electric Power Shentou Power Generation Co., Ltd., China Household Electricity Research Institute (Beijing) Testing and Certification Co., Ltd., Harbin Institute of Technology, Hefei General Machinery & Electrical Products Testing Institute Co., Ltd., BSH Home Appliances Investment (China) Co., Ltd. Limited Company, Kunming University of Science and Technology, Lenovo (Beijing) Co., Ltd., Beijing Zunguan Technology Co., Ltd. (National Electronic Computer Quality Inspection and Testing Center) Heart). The main drafters of this document are. Chen Haihong, Xia Yujuan, Shen Xin, Li Pengcheng, Bai Quan, Wang Yue, Wang Qiuwang, Zhu Xuncheng, Yang Jie, Lü Keqi, and Wang Yi. Ding Guoliang, Chen Dongpo, Tian Yuan, He Can, Cao Xin, Zhang Jin, Peng Yanyan, Wang Hongxu, Yang Hongliang, Guo Jianglong, Zhang Sinan, Qi Xin, Ni Long, Xie Baogang, Yuan Haiyan, Ding Qing, Luo Zhao, Hu Wen, Yin Zhihui. This document was first published in 2009, and this is its first revision. General Rules for Compiling Energy Efficiency Indicators for Energy-Consuming Products

1 Scope

GB/T 24489-2025 is the Chinese national standard covering how an efficiency standard is written in the first place - the choice of metric and the test conditions behind it, the market and technology analysis that sets the levels, the grades and the timing of their tightening, and the verification. This is the standard the mandatory efficiency standards are drafted against. Issued on 31 October 2025, it has been in force since 1 May 2026, replacing GB/T 24489-2009.

This document specifies the classification of energy efficiency indicators for energy-consuming products, the content of energy efficiency standards, the basis and requirements for their compilation, the principles for value determination, and the testing of energy efficiency indicators. And calculation methods and energy efficiency standard implementation requirements. This document applies to the development of energy efficiency standards for energy-consuming products.

2 Normative references

This document has no normative references.

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Products, equipment, and facilities that directly consume energy to achieve a specific

function or complete a service, as well as those that do not consume energy themselves during use. Energy refers to materials, appliances, equipment, and facilities that consume less energy but can reduce the energy consumption of systems, equipment, or facilities.

3.2 Energy efficiency indicators Energy consumption indicators Energy utilization performance parameters, expressed as energy utilization efficiency or energy consumption of energy-consuming products (3.1).

3.3 Energy efficiency standards The collective term for standards used to regulate energy efficiency indicators (3.2) and other requirements of energy-consuming products.

Note. Energy efficiency standards include some or all of the energy efficiency indicators such as energy efficiency level, energy efficiency limit value, and target energy efficiency limit value.

3.4 Energy efficiency rating A grading method for the differences in energy efficiency indicators (3.2) of energy-consuming products.

3.5 Energy efficiency limits The minimum energy efficiency index (3.2) of the energy-consuming products allowed under the test conditions specified in the energy efficiency standard (3.3).