

ICS 03.120.20
CCS A 00



**CERTIFICATION AND ACCREDITATION INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

RB/T 121-2023

Replacing RB/T 121-2016

**Energy management systems - Requirements for certification
on building materials enterprises(excluding cement, glass,
ceramics)**

(English Translation)

Issued on: October 16, 2023

Implemented on: December 1, 2023

Issued by: National Certification and Accreditation Administration

Table of Contents

Preface
1 Scope
2 Normative references
3 Terms and Definitions
4 Organizational environment
4.1 Understanding the organization and its environment
4.2 Understanding the needs and expectations of stakeholders
4.3 Determine the scope of the energy management system
4.4 Energy Management System
5 Leadership
5.1 Leadership and commitment
5.2 Energy Policy
5.3 Organizational roles, responsibilities and authorities
6 Planning
6.1 Measures to address risks and opportunities
6.2 Goals, energy targets and planning for their achievement
6.3 Energy Review
6.4 Energy Performance Parameters
6.5 Energy Benchmarks
6.6 Planning of energy data collection
7 Support
7.1 Resources
7.2 Capabilities
7.3 Consciousness
7.4 Information Exchange
7.5 Documented information
7.5.1 General Principles
7.5.2 Create and Update
7.5.3 Control of documented information
8 Run
8.1 Operational planning and control
8.2 Design

8.3 Procurement

9 Performance Evaluation

9.1 Monitoring, measurement, analysis and evaluation of energy performance and energy management systems

9.1.1 General Principles

9.1.2 Compliance evaluation of laws, regulations and other requirements

9.2 Internal Audit

9.3 Management Review

10 Improvement

10.1 Nonconformity and Corrective Action

10.2 Continuous Improvement

Appendix A (Informative) Basic Information on Energy Management in the Building Materials Industry

Appendix B (Informative) Commonly used laws, regulations, other requirements and standards for energy management in the building materials industry

Appendix C (Informative) Application examples of some requirements of the energy management system of building materials enterprises

Reference

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents"

Drafting:

This document is GB/T 23331-2020 "Energy Management System Requirements and Use Guide" in the building materials industry (excluding cement, glass, ceramics Porcelain enterprises) specific requirements:

This document replaces RB/T 121-2016 "Energy Management System Certification Requirements for Building Materials Enterprises (excluding cement, glass, and ceramics)" and Compared with RB/T 121-2016, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

- Changed some terms and definitions (see Chapter 3, Chapter 3 of the:2016 edition);
- Added the environment in which building materials enterprises are located and the needs and expectations of stakeholders (see 4.1 and 4:2);
- Added relevant content that should be considered in the scope of the energy management system (see 4.3);

- Added the responsibilities of the energy management team (see 5.3);
- Added appropriate measures that building materials companies should take when planning to respond to risks and opportunities (see 6.1);
- Changed the requirements for the content of energy review criteria for building materials enterprises when conducting energy review (see 6.3, 4:4:3 of the:2016 edition);
- Changed the professional requirements for energy performance parameters and energy benchmarks for building materials enterprises (see 6.4 and 6:5, 4:4:4 and 4:4:5);
- Added requirements related to energy data collection plan (see 6.6);
- Changed the resource content of the energy management system for building materials enterprises (see 7.1, 4:5 of the:2016 edition);
- Changed the professional requirements for the operation control of the energy management system of building materials enterprises (see 8.1, 4:5:5 of the:2016 edition);
- Added considerations for continuous improvement (see 10.2):

1 Scope

This document specifies the requirements for energy management systems in building materials companies:

This document is applicable to building materials enterprises (excluding cement, glass and ceramic enterprises) to establish, implement, maintain and improve their energy management system:

It is used for energy management system certification of building materials enterprises, and can also be used by relevant parties to evaluate the energy management system of building materials enterprises and the energy efficiency of building materials enterprises:

The basis for self-evaluation of the resource management system:

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document:

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document:

GB/T 2589 General rules for calculation of comprehensive energy consumption GB 17167 General rules for the allocation and management of energy metering instruments in energy-consuming units GB/T 23331-2020 Energy Management System Requirements and

Usage Guide GB/T 24851 Requirements for the deployment and management of energy metering equipment in the building materials industry GB 29450 Energy consumption limit per unit product of glass fiber GB 30183 Energy consumption limits per unit product for rock wool, slag wool and their products GB 30184 Energy consumption limit per unit product of asphalt-based waterproofing membrane GB 30526 Energy consumption limits per unit product of sintered wall materials and foam glass GB 36888 Energy consumption limit per unit product of ready-mixed concrete GB 38263 Energy consumption limits per unit of cement products

3 Terms and definitions

The following terms and definitions as defined in GB/T 2589, GB 17167, GB/T 23331-2020, GB/T 24851 and the following terms and definitions apply to this document:

Quality parameters in order to control product quality, control indicators are specified for raw materials, semi-finished products and finished products:

Examples: Indicators such as material grindability, flammability and moisture content, quality indicators specified in product standards, etc:

Process parametersprocessparameters in order to meet the operating requirements of the main production systems and auxiliary production systems, the operating indicators specified for production equipment, facilities, systems and processes:

Examples: drying temperature of drying facilities, pressure of forming presses, temperature and pressure of autoclaves, mixing time of mixers, firing temperature of kilns, Air volume, etc: