

ICS 13.020.10

CCS Z 00



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

GB/T 46783-2025

**Greenhouse gas management system - Implementation
guidance for building materials enterprises**

温室气体管理体系 建材企业实施指南

Issued on: December 2, 2025

Implemented on: July 1, 2026

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

Table of Contents

1	Scope
2	Normative references
3	Terms and Definitions
4	The environment in which the company operates
4.1	Understanding the internal and external factors of an enterprise
4.3	Determine the scope of the greenhouse gas management system.
4.4	Greenhouse Gas Management System
5.1	Leadership Role and Commitment
5.2	Greenhouse Gas Policy
5.3	Position, Responsibilities, and Authority
6.1	Planning for responding to risks and opportunities
6.2	Greenhouse Gas Targets and Planning for Their Achievement
6.3	Planning of Greenhouse Gas Data Collection Program
6.4	Planning for Changes 13 7 supports
7	Flat Glass Manufacturers
7.1	Resource
7.2	Ability
7.3	Consciousness
7.4	Information Exchange
7.5	Documented Information
8	Cement Production Enterprises
8.1	General Provisions
8.2	Design
8.3	Procurement
8.4	Operation Control
8.5	Change Control
9	Ceramic Manufacturing Enterprises
9.1	Monitoring, Measurement, Analysis, and Evaluation
9.2	Compliance Evaluation
9.3	Internal Audit
9.4	Management Review
10	Improvements

10.1 General Provisions

10.2 Nonconformities and Corrective Actions

22 Reference

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 involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed by the China Building Materials Federation. This document is jointly managed by the China Building Materials Federation and the National Technical Committee on Standardization of Carbon Emission Management (SAC/TC548). This document was drafted by: Beijing Guojianlianxin Certification Center Co., Ltd., China National Institute of Standardization, and Shenzhen Zhonghong Low-Carbon Building Technology Co., Ltd. Limited Liability Company, Fujian Jinjiang Haoshan Building Materials Co., Ltd., China Resources Cement Technology R&D (Guangxi) Co., Ltd., China Construction Western Construction Group No. 8 (Shanghai) Co., Ltd., Jilin Jinyu Jidong Environmental Protection Technology Co., Ltd., Sichuan Lisen Building Materials Group Co., Ltd., Mona Lisa Group Co., Ltd. Limited Company, TOTO (China) Co., Ltd., Guangdong Jianyi (Group) Ceramics Co., Ltd., Anhui Conch Industry Technology Research Institute Co., Ltd., Sinoma International Intelligent Technology Co., Ltd., Xinjiang Tianshan Cement Co., Ltd., Jiangxi Wannianqing Cement Co., Ltd., and Hebei Xinboer Ceramics Industry Co., Ltd. Limited Liability Company, Panzhihua Iron and Steel Research Institute Co., Ltd. of Panzhihua Iron and Steel Group, Xi'an University of Architecture and Technology, China Construction Second Engineering Bureau Second Construction Engineering Co., Ltd. China Construction Sixth Engineering Bureau Eighth Construction Co., Ltd., Beijing Jingang Road Engineering Construction Co., Ltd., Zhonglin Green Carbon (Beijing) Technology Co., Ltd., Yuepuhu Urban and Rural Design Institute Co., Ltd., Xinjiang Yarkand River Basin Design Institute Co., Ltd., Beijing Xue Dilong Technology Co., Ltd., China Railway 25th Bureau Group Co., Ltd. Group Electrification Engineering Co., Ltd., China Construction Third Engineering Bureau Group (Shenzhen) Co., Ltd., Tianjin Tianrong Environmental Technology Development Co., Ltd., Zhejiang Jiaogong Hong Tu Transportation Construction Co., Ltd., Zhongzheng International Certification (Shenzhen) Co., Ltd., China Construction Second Engineering Bureau Third Construction Engineering Co., Ltd., Shanxi Fifth Construction Group Limited Liability Company, China Railway 22nd Bureau Group Co., Ltd., Shenzhen Special Economic Zone Construction Engineering Science and Technology Group Shengteng Technology Co., Ltd., China Railway 25th Bureau Group The Fourth Engineering Company

of the Group, the Fifth Engineering Company of China Railway 20th Bureau Group, China Railway Shanghai Engineering Bureau Group Co., Ltd., and Yuanyuan New Materials Limited Liability Company, Jiangxi Xingke Electronic Substrate Co., Ltd., Ganzhou Guangjian Fiberglass Co., Ltd., Qiannianzhou New Material Technology Group Co., Ltd. China Construction Sixth Engineering Bureau Civil Engineering Co., Ltd., China Communications Second Harbor Engineering Bureau Co., Ltd., China Railway Construction Group Co., Ltd., and China Construction Third Engineering Bureau Group Co., Ltd. South China Co., Ltd., China Metallurgical Construction Group Co., Ltd., China 22nd Metallurgical Construction Group Co., Ltd., Zhengzhou Far East Refractory Materials Co., Ltd., China Railway Seventh Group Co., Ltd. China Construction Third Engineering Bureau Group Wuhan Engineering Co., Ltd., Qingdao Zhenye Construction Engineering Co., Ltd., China Construction Third Engineering Bureau Group Co., Ltd., and Building Materials Industry Quality Certification Management Bureau Management Center. The main drafters of this document are. Yin Jingyu, Liu Qingyi, Sun Liang, Gu Yan, Huang Jin, Bian Ji, Lu Hongkui, Tao Congxi, Huang Yixiong, Chen Jun, and Shen Huiming. Zhang Qikang, Liu Chuan, Yang Junzhi, Zhan Jiagan, Zhong Gen, Liu Deping, Sun Lin, Liu Gaohui, Wu You, Song Zhanping, Xu Dewu, Li Hao, Wang Lubo, Gu Ran Hu Naikun, Ma Zhengbiao, Wang Wei, Yan Guoyin, Wu Guorui, Feng Lin'an, Cao Jueyu, Nan Wenwen, Yang Meng, Chu Mingjiao, Bai Lei, Yang Shangrong, Huang Yong Xiong Min, Huang Xin, Zhang Quanlei, Ma Tonghua, Rui Jingwei, He Chaoran, Han Feng, Ou Wei, Zeng Congwei, Ke Hong, Long Zhanwei, Ke Shuangxue, Xu Xueqin, Hou Chunming Sun Li, Li Yuemei, Zuo Chunyang, Liang Qian, Wang Yongli, Zou Jiabin, Ma Ming, Zhuo Hailong, Zhang Weina, Zhang Yuwei, Zhao Lei, Tang Dengmei, Zhang Yajun, Huang Hualong Peng Liang, Wei Xisheng, Zhang He, Zhang Xianzheng, Luo Qian, Zhang Haitao, Wang Junchao, Zhang Yuliang, Wang Xueqiang, Wang Huichao, Xu Jibao, Zhang Jianbin, Zheng Jianjun.

0.1 Purpose of the Greenhouse Gas Management System Against the backdrop of a global low-carbon economy and sustainable development, "peak carbon and carbon neutrality" has become an important strategic goal for my country. Greenhouse gases A comprehensive greenhouse gas management system is a fundamental management tool covering carbon emissions and carbon assets. By establishing a systematic greenhouse gas management system, building materials companies can... Integrating greenhouse gas management into corporate strategic decision-making and operational control processes can effectively address the risks and opportunities of carbon emission reduction and contribute to national development. To achieve the "dual carbon" target. This document provides guidance and suggestions for building materials companies to establish, implement, maintain, and improve their greenhouse gas management systems, helping them to achieve [the desired results]. A systematic approach achieves the intended results of its greenhouse gas management system, including improving greenhouse gas performance and fulfilling greenhouse gas-related compliance obligations. To achieve greenhouse gas targets. The greenhouse gas management system is part of the

comprehensive management system of building materials enterprises. This document conforms to the ISO harmonization structure for management system standards. In accordance with the requirements of this document, building materials companies may establish a separate greenhouse gas management system, or they may integrate it with other management systems (such as quality management systems, environmental management systems, etc.). A comprehensive management system is established by combining environmental management systems, occupational health and safety management systems, energy management systems, measurement management systems, etc. Regardless of... In establishing, implementing, maintaining, and improving a greenhouse gas management system, it is advisable to fully draw upon and integrate the existing management systems of the building materials company itself. Based on the foundation and practice, so as to achieve overall coordination and unity of the enterprise management system. This document does not propose specific greenhouse gas performance criteria, nor does it increase or change the legal responsibilities of building materials companies.

0.2 Planning-Implementation-Inspection-Improvement Model The approach to establishing a greenhouse gas management system is based on the "Plan-Do-Check-Act" (PDCA) model. The PDCA model is... The company provides a cyclical, incremental process for continuous improvement. This model can be applied to greenhouse gas management systems and their individual components. The unique elements are shown in Figure

1. This pattern can be briefly described as follows:

---Planning. Establish the necessary greenhouse gas targets and processes to achieve results consistent with the company's greenhouse gas policy;

---Implementation. The process of carrying out the planned action;

---Inspection. Monitor and measure processes in accordance with greenhouse gas policies (including its commitments), targets, and operating guidelines, and report the results;

---Improvement. Take steps to continuously improve. Figure 1. PDCA cycle of greenhouse gas management system

Greenhouse Gas Management System Implementation Guidelines for Building Materials Enterprises

1 Scope

GB/T 46783-2025 is the Chinese national standard covering putting a greenhouse gas management system into a cement, glass or ceramics works - the boundary and the sources, the process emissions from calcining limestone that no fuel switch removes, the data collection and the reduction targets. Building materials are the second largest industrial source of CO₂ in China after steel, and most of it is process emissions. First edition, under the China Building Materials Federation. It was issued on 2 December 2025 and has been in force since 1 July 2026, as a first edition. The document is under the