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

GB/T 46412-2025

**Asset management - Application guidance of carbon asset
management system**

资产管理 碳资产管理体系应用指南

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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 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 Asset Management (SAC/TC583). This document was drafted by: China Southern Power Grid Energy Development Research Institute Co., Ltd., Beijing Shougang Co., Ltd., and China National Institute of Standardization. Research Institute, State Grid Henan Electric Power Company Economic and Technological Research Institute, Beijing Zhongchuang Carbon Investment Technology Co., Ltd., COFCO Group Co., Ltd., Guangdong Yue Dian Environmental Protection Co., Ltd., State Grid Yingda Carbon Asset Management (Shanghai) Co., Ltd., Shaanxi Coal New Energy Dual-Carbon Technology Co., Ltd., Shandong Land Digital Technology Group Co., Ltd., China Power Construction Group East China Survey and Design Institute Co., Ltd., Huaneng Carbon Asset Management Co., Ltd., China Southern Power Grid Co., Ltd., Jiangsu Coastal Carbon Asset Management Co., Ltd., and Jiangsu Provincial Institute of Quality and Standardization. The main drafters of this document are: Ang Gao, Wu Hongliang, Liu Benjie, Li Hua, Wang Shiqian, Yang Yueyong, Liang Zhanpeng, Wang Yuanyuan, Li Qiuyan, and Yang Ming. Wang Jianchao, Li Yangyang, Zhou Hongming, Li Qiang, Wang Hui, Zhang Yinlu, Guo Jian, Liu Yu, Zhou Xiaoxiao, Zhu Chuang, Wang Yuan, Jin Yaning, Dai Fubo, Zhang Chenhao Wu Di, Jiang Yuqi, Dong Jiaojiao, Fan Jiaming, Wang Jiayu, Zhang Litu, Yan Guozhen, Chen Jie, Zhang Xinshuai, Liu Yuwei, Wan Li, Tang Qinxue, Xie Tongping Liu Meiyin, Geng Xinze, Shi Tianyi, Liu Jue, Li Jun, Shen Xiaojing. Application Guidelines for Carbon Asset Management System

1 Scope

GB/T 46412-2025 is the Chinese national standard covering treating emission allowances and credits as assets to be managed - the inventory and valuation, the surrender obligation against the holding, the trading and the risk of a price move, and the controls and reporting that a management system requires. First edition, and it belongs with the greenhouse gas management system standard GB/T 46566-2025. Already in force. Issued on 5 October 2025, it has been in force since 5 October 2025.

This document provides application guidance for organizations to establish, implement, maintain, and continuously improve a carbon asset management system, outlining organizational context, leadership, and other relevant factors. Related elements include function, planning, support, operation, performance evaluation, and improvement. This document applies to all types of organizations that use GB/T 33173 to establish, implement, and review carbon asset management systems.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 24067 Requirements and Guidelines for Quantifying the Carbon Footprint of Greenhouse Gas Products

GB/T 32150 General Rules for Greenhouse Gas Emission Accounting and Reporting by Industrial Enterprises

GB/T 33172 Overview, Principles and Terminology of Asset Management

GB/T 33173 Asset Management System Requirements

GB/T 43706 Guidelines for the Implementation of Strategic Asset Management Plans (SAMPs)

3 Terms and Definitions

The terms and definitions defined in GB/T 24067, GB/T 32150, and GB/T 33172, as well as the following terms and definitions, apply to this document.

3.1 carbon assets Resources that are legally owned or controlled by an organization and that can bring direct or indirect economic benefits, and that are related to greenhouse gas activities.

Note. This includes carbon quotas and carbon credits and their derivatives, carbon indicators under the carbon emission cap and carbon intensity control system, and low-carbon technologies/products/services. Green premiums for services, etc.

3.2 A set of interrelated or interacting elements used by an organization to establish carbon asset management policies and objectives, and the processes for achieving those objectives. elements.

3.3 The competent authorities allocate carbon emission rights to key emitting entities or greenhouse gas emission reduction project developers, allowing these carbon emission

rights to be used in... A market-based mechanism that facilitates transactions among market participants to achieve emission reduction targets in a way that optimizes social cost-effectiveness. [Source: JR/T 0244-2022, 3.4]

3.4 Based on carbon emissions trading, it serves commercial activities that reduce greenhouse gas emissions or increase carbon sequestration capacity, using carbon quotas. Carbon credits and other carbon emission rights are the underlying assets or mediums for financing activities.