ICS 13.020.10
CCS Z04

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 32151.29-2024

Requirements of the greenhouse gas emissions accounting and reporting - Part 29: Mechanical equipment manufacturing enterprise

温室气体排放核算与报告要求 第29部分：机械设备制造企业

Issued on: September 1, 2024 **Implemented on: April 1, 2025**

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

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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 part 29 of GB/T 32151.GB/T 32151 has been published in the following parts.

1.Power generation enterprises;

2.Grid enterprises;

3.Magnesium smelting enterprises;

4.Aluminium smelting enterprises;

5.Iron and steel production enterprises;

6.Civil aviation enterprises;

7.Flat glass production enterprises;

8.Cement production enterprises;

9.Ceramic production enterprises;

10.Chemical production enterprises;

11.Coal production enterprises;

12.Textile and clothing enterprises;

1 Scope

GB/T 32151.29-2024 is the mechanical equipment manufacturing part of the Chinese greenhouse gas accounting and reporting series, and it applies to an enormous population of Chinese factories. For a machinery maker the emissions are mostly indirect, purchased electricity for machining, assembly, compressed air and lighting, with direct emissions from heat treatment furnaces, welding gases, painting ovens and the plant boiler; the accounting difficulty is not the physics but the boundary, since these firms buy castings, forgings and components rather than making them and the line between the enterprise's own emissions and its supply chain has to be drawn consistently. The standard sets exactly that boundary, then the measurement and monitoring requirements, the calculation steps and methods for each emission source, the data quality management and the content and format of the report, with informative annexes giving the reporting template and the default values of the parameters. It takes effect on 1 April 2025.

This document specifies the accounting boundaries, accounting steps and accounting procedures for the accounting and reporting of greenhouse gas emissions of machinery and equipment manufacturing enterprises. Methods, data quality management, report content and format. This document applies to the accounting and reporting of greenhouse gas emissions by machinery and equipment manufacturing enterprises.

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 213 Method for determination of calorific value of coal

GB/T 384 Determination of calorific value of petroleum products

GB 17167 General rules for the allocation and management of energy metering instruments in energy-consuming units

GB/T 22723 Determination of energy of natural gas

GB/T 32150 General principles for accounting and reporting of greenhouse gas emissions from industrial enterprises

3 Terms and definitions

The terms and definitions defined in GB/T 32150 and the following apply to this document.

3.1 Greenhouse gas The natural and human-caused gases in the atmosphere that absorb and emit radiation from the Earth's surface, atmosphere, and clouds. The gaseous component of radiation with wavelengths in the infrared spectrum.

Note. The greenhouse gases covered in this document include carbon dioxide (CO_2), sulfur hexafluoride (SF_6), hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs). [Source: GB/T 32150-2015, 3.1, modified]

3.2 reporting entity A legal entity that emits greenhouse gases or an independent accounting unit that is deemed to be a legal entity. [Source: GB/T 32150-2015, 3.2]

3.3 Metal products manufacturing, general equipment manufacturing, special equipment manufacturing, automobile manufacturing, railway, shipbuilding, aerospace and other transportation equipment manufacturing A legal person enterprise or an independent accounting unit deemed to be a legal person whose main business is manufacturing, electrical machinery and equipment manufacturing, and instrument manufacturing.

3.4 Greenhouse gas emissions from the oxidative combustion of fossil fuels.