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

GB/T 46565-2025

**Technical specification for the assessment of greenhouse gas
emission reductions at project level - Echelon utilization of
retired vehicle batteries**

基于项目的温室气体减排量评估技术规范 动力电池梯次利用

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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 by the National Technical Committee on Standardization of Environmental Management (SAC/TC207). This document was prepared by the National Technical Committee on Standardization of Environmental Management (SAC/TC207) and the National Technical Committee on Standardization of Automobiles (SAC/TC207). 114) Joint jurisdiction. This document was drafted by: Shanghai Second Polytechnic University, China National Institute of Standardization, Jiangsu Tianneng New Materials Co., Ltd., and Zhejiang Huayou Green Energy. Technology Co., Ltd., Xiamen Tungsten Co., Ltd., Shanghai Yingling Information Technology Co., Ltd., Zhejiang New Era Zhongneng Technology Co., Ltd. Company, Shandong Electric Power Engineering Consulting Institute Co., Ltd., Jiangxi Ganfeng Circulation Technology Co., Ltd., Jiangxi Ruida New Energy Technology Co., Ltd., Wuhan Electric Power Power Battery Regeneration Technology Co., Ltd., Shanghai Weixiang Zhongyi New Energy Technology Co., Ltd., and Shanghengdao International Standard Technical Service (Shanghai) Co., Ltd. Company, Anhui Green Circular Energy Technology Co., Ltd., Anhui Woboyuan Technology Co., Ltd., Shanghai Yichisi Environmental

Technology Co., Ltd., Qianshibiao Quasi-Technology Service (Suzhou) Co., Ltd., Changsha Jinkai Recycling Technology Co., Ltd., Ganzhou Longkai Technology Co., Ltd., Hunan Yunchu Recycling New Energy Source Technology Co., Ltd., Guangdong Dido New Energy Co., Ltd., Guangdong Kunpeng Environmental Protection Technology Co., Ltd., Jiangsu Lithium Technology Co., Ltd., Zhongqing Environment (Shandong) Co., Ltd., and Cloud Storage New Energy Technology Co., Ltd. The main drafters of this document are. Hao Hao, Zhuang Xuning, Xu Bingsheng, Song Xiaolong, Zhen Aigang, Bao Wei, Lü Zhe, Xu Jiabin, Hou Shan, Zhang Lijia, and Gao Dongfeng. Yao Xiaobo, Song Jun, Hou Xiaochuan, Zhang Xiaoming, Chen Huagen, Lu Xingyu, Zhang Yuping, Qin Yujie, Meng Fanqi, Li Cheng, Li Yunsheng, Ma Liqiang, Wu Xinping Zhu Xiaoming, Xiao Wei, Lu Ning, Liu Jingru, Yan Qunxuan, Liu Chao, Xiong Wei, Zhang Yiluo, Qian Xiaolong, Fang Dawei, Guo Haihua, Zeng Qingqian, Pei Pengju, Wang Hai Zhu Wei and Ci Song.

The secondary use of power batteries is an important way for the battery industry to reduce emissions. This document defines the secondary use of power batteries as the reuse of batteries with high safety and capacity. Retired power batteries with good capacity retention, after dismantling, sorting, testing, and reassembly processes, are used in low-speed electric vehicles (excluding electric bicycles). The power batteries are reused in typical scenarios such as "vehicles), backup power for communication base stations, and small-scale energy storage." This cascade utilization of power batteries extends their lifespan and... Reducing the resource and energy consumption in producing new batteries and avoiding related greenhouse gas emissions are crucial for promoting green development in industries such as new energy vehicles and power batteries. These important measures for low-carbon development will help promote the achievement of my country's carbon peaking and carbon neutrality goals. This document, based on the identification and analysis of greenhouse gas emission sources and types related to baseline and project scenarios, proposes dynamic... The method for quantifying greenhouse gas emission reduction in battery reuse projects aims to guide the scientific, rational, and prudent evaluation of retired power battery reuse projects. Estimate greenhouse gas emission reductions. To facilitate domestic and international exchanges, and in accordance with the relevant requirements of the Intergovernmental Panel on Climate Change (IPCC), this series of documents... The unit of measurement is expressed in the form of "International Unit of Measurement for Substance (Element)" or "Substance (Element) International Unit of Measurement", such as kgC. The terms "kg carbon", "kgCO₂e" represent the equivalent of kilograms of carbon dioxide, and "Nm³" represents cubic meters under standard conditions. Project-based assessment of greenhouse gas emission reductions Technical Specifications for the Cascaded Utilization of Power Batteries

1 Scope

GB/T 46565-2025 is the Chinese national standard covering counting the carbon saved by

giving a retired EV battery a second life in storage rather than shredding it - the baseline of a new battery built instead, the boundary, the remaining capacity and life assumed, and the monitoring. First edition. Issued on 31 October 2025, it has been in force since 31 October 2025.

This document specifies the content, procedures, project boundary determination, and emission reduction assessment for greenhouse gas emission reduction projects involving the cascade utilization of retired power batteries. Source identification, greenhouse gas types, project and baseline scenarios, emission reduction calculations, monitoring and data quality management, and emission reduction assessment reports. prepared by. This document applies to projects involving the secondary use of retired power batteries. The scenarios for secondary use include low-speed electric vehicles (excluding electric bicycles) and communication... Backup power supplies for base stations, small-scale energy storage systems, etc. This document does not apply to electric bicycles or large-scale energy storage projects.

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 33760-2017 General Requirements for Technical Specifications of Project-Based Greenhouse Gas Emission Reduction Assessment

3 Terms and Definitions

The terms and definitions defined in GB/T 33760-2017, as well as the following terms and definitions, apply to this document.

3.1 Greenhouse gases Naturally occurring and human-generated elements in the atmosphere that can absorb and disperse pollutants produced by the Earth's surface, atmosphere, and clouds. Gaseous components of radiation with wavelengths in the infrared spectrum. [Source: GB/T 32150-2015, 3.1, with modifications]

3.2 Greenhouse gas source A unit or process that releases greenhouse gases into the atmosphere. [Source: GB/T 33760-2017, 3.2]

3.3 The total amount of greenhouse gases released into the atmosphere during a specific period (in units of mass). [Source: GB/T 32150-2015, 3.6]

3.4 The calculated reduction in greenhouse gas emissions generated by the project over a certain period compared to the baseline scenario. [Source: GB/T 33760-2017, 3.5]