

ICS 65.020.40

CCS B 64



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

GB/T 46113-2025

**Code of practice for improving carbon sink through
afforestation**

造林增汇技术规程

Issued on: August 29, 2025

Implemented on: December 1, 2025

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

Table of Contents

Preface	III
1 Scope	1
2 Normative references	1
3 Terms and Definitions	1
4 Basic Principles	2
5 Afforestation and Sedimentation Technical Procedures	2
6 Selection of afforestation land	3
7 Afforestation methods and design	3
7.1 Tree species selection	3
7.2 Seeds and seedlings	3
7.3 Afforestation Technology	3
8 Unforested land cultivation and management	4
8.1 Unforested forest cultivation	4
8.2 Management of unforested areas	4
8.3 Disaster Prevention	4
9 Assignment Design	5
10 Monitoring and Evaluation	5
11 File Management	5
Appendix A (Informative) Afforestation and Sedimentation Activity Data Record Sheet	6
References	8

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.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document is proposed and coordinated by the State Forestry and Grassland Administration.

This document was drafted by: Institute of Forest Ecology, Environment and Nature Conservation, Chinese Academy of Forestry, State Forestry and Grassland Administration,

China Green Carbon Sink Foundation, The Nature Conservancy (USA) Beijing Representative Office, Beijing Forestry University, China Longjiang Forest Industry Group Co., Ltd., Research Institute of Forestry, Chinese Academy of Forestry, Institute of Forestry Science and Technology Information, Chinese Academy of Forestry, Wood Industrial Research Institute, China Power Construction Group Northwest Survey and Design Institute Co., Ltd., National Forestry and Grassland Administration Northwest Survey and Planning Institute, Yunnan Province Chinese Academy of Forestry and Grassland Sciences, Beijing Zhongchuang Carbon Investment Technology Co., Ltd., Zhejiang Forestry Carbon Sink Management Center, Zhejiang Forestry Survey Planning and Design Institute of Forestry, China Three Gorges Corporation, Hubei Forestry Research Institute, Huazhong Agricultural University, Zhejiang Agricultural and Forestry University, Daxinganling Forestry Group, Yichun Forest Industry Huidesheng Ecological Technology Co., Ltd., Datong Beichuan River Source District National Nature Reserve Administration, Guangxi Nanning Forest Forestry Survey and Design Institute Co., Ltd., Zhejiang Academy of Forestry Sciences.

The main drafters of this document are: Zeng Lixiong, Guo Qingjun, Liu Jiashun, Zhang Guobin, Gou Mengmeng, Zhu Jianhua, Jian Zunji, Xiao Wenfa, Zhang Xiaoquan, Wu Shuhong, Sun Liang, Bai Yanfeng, He Youjun, Wu Shuirong, Xu Jinmei, Li Qi, Tian Yu, Feng Yuan, Li Chenyu, Cheng Ailin, Wang Zeng, Liu Gang, Tian Huiling, Guo Xueyuan, Li Zichao, Niu Jinyan, Chen Beiling, Zhou Mingzhu, Huang Guiyun, Qiu Liwen, Pan Lei, Wang Xiaorong, Cui Hongxia, Fu Tian, Wang Pengcheng, Teng Mingjun, Wang Yixiang, Han Lu, Liu Jiming, Sun Shusuo, Su Quan, Liang Yanfen, Li Fuhua, Yao Liangjin, and Wu Cuirong.

Technical regulations for afforestation and carbon sink enhancement

1 Scope

This document establishes the technical procedures for afforestation and carbon sink enhancement, and stipulates the selection of afforestation sites, afforestation methods and designs, and tending of unforested forests.

It also describes the technical requirements for management, maintenance, operation design, monitoring and evaluation, and the traceability verification method for archive management.

This document applies to afforestation activities aimed at increasing carbon sinks.

2 Normative references

GB/T 15776

GB/T 15781

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 forestation

On sparse woodlands, shrublands, ruins and other lands planned for afforestation, artificial afforestation, aerial seeding and closed-mountain afforestation measures are implemented.

The process of establishing or restoring a forest.

[Source. GB/T 15776-2023, 3.1, modified]

3.2 forest carbon sink forestcarbonsink

The process, activity or mechanism by which forest ecosystems absorb and store carbon dioxide from the atmosphere.

Note. Forest ecosystems absorb carbon dioxide from the atmosphere through plant photosynthesis and then recycle it through the respiration of plants, animals or microorganisms, biomass or dead. The decomposition and combustion of dead organic matter releases carbon dioxide into the atmosphere, which ultimately manifests as a net increase in carbon storage in the forest ecosystem carbon pool.

[Source. LY/T 2252-2014, 3.3, modified]

3.3 carbon emission

Measurable greenhouse gas emissions from afforestation activities.

Note. Includes greenhouse gas emissions from activities such as the use of fuel-fired machinery, fertilization or liming, soil disturbance, logging and forest clearing.

3.4

Activities that increase forest carbon sinks by taking measures to increase carbon sinks and reduce emissions during afforestation.

Note. The net carbon sink generated by afforestation activities is the increase in carbon sinks generated by afforestation activities minus carbon emissions.