

# 提升森林质量 增强碳汇功能

Improve Forest Quality and Enhance Carbon Sink Function

## 贡献内蒙古大兴安岭重点国有林区力量

Contribution from greater khingan Mountains Forest in Inner Mongolia

内蒙古大兴安岭重点国有林管理局

key state-owned Forestry Management Bureau Of Greater Khingan Inner Mongolia

韩锡波 (HAN XIBO)





# 提 纲 outline

- 内蒙古大兴安岭林业碳汇资源与潜力

Carbon sink resources and potential of forestry in greater khingan of Inner Mongolia

- 内蒙古大兴安岭林业碳汇发展与研究

Development and research of forest carbon sink in greater khingan of Inner Mongolia

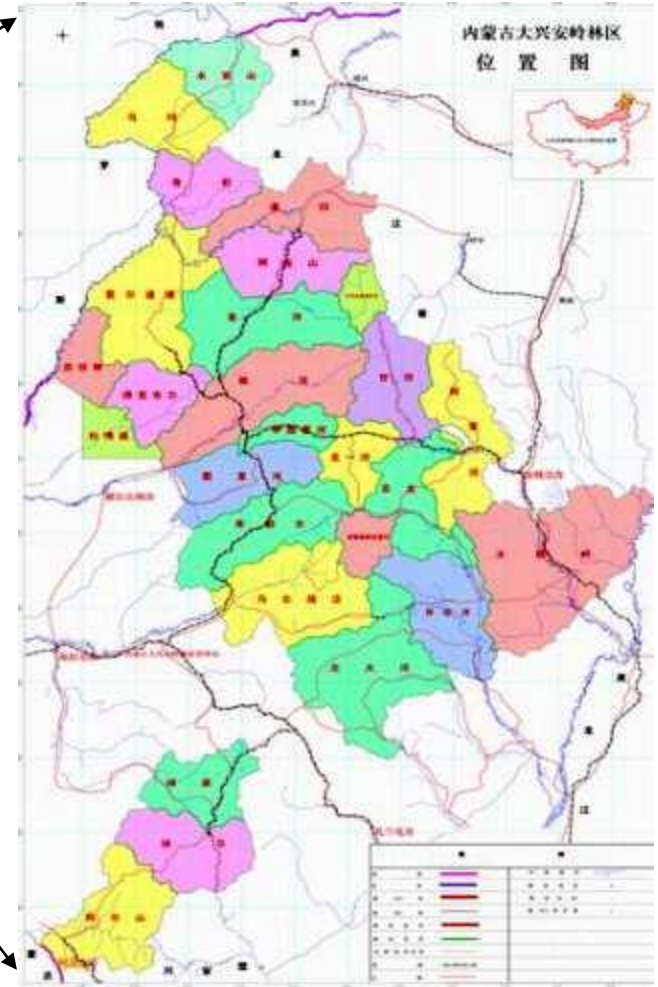
- 林业碳汇发展存在的问题及建议

Problems and suggestions on forestry carbon sink development

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# 位置 LOCATION





## ➤ 资源与潜力

内蒙古大兴安岭重点国有林区：  
生态功能区总面积10.67万平方公里，  
森林覆盖率78.39%，  
森林面积8.37万平方公里，  
森林蓄积9.4亿立方米，  
森林面积占全国国有林区的10.9%，  
天然林蓄积占全国的1/14，  
是我国重要的固碳、储碳基地。

## ➤ Resources and Potential

Key State-owned Forest Management Bureau  
of Greater Khingan Inner Mongolia:  
Ecological functional zones cover 106,700 km<sup>2</sup>  
The forest coverage rate is 78.39%  
The forest covers an area of 83,700 km<sup>2</sup>  
The forest growing stock 940 million m<sup>3</sup>  
Forest area accounts for 10.9% of China's  
state-owned forest areas  
Natural forest stock accounts for 1/14 of  
China's total  
Important carbon sequestration and carbon  
storage area of China



## 内蒙古大兴安岭林区1952年至2018年森林资源增长情况

The growth of forest resources in the greater khingan mountains of Inner Mongolia from 1952 to 2018

	1952	2018	growth rate
有林地面积 forest coverage rate (million hectare)	6.36	8.37	31.5%
活立木总蓄积 living wood growing stock (million m <sup>3</sup> )	6.62	10.33	56%
森林覆盖率 forest coverage rate	60.1%	78.3%	30.4%



**林业碳汇相比工业减排来说，具有生态的多重效益。**

Compared with industrial emission reduction, forestry carbon sinks have multiple ecological benefits.

**保护生物多样性、涵养水源、防风固沙等等。**

Conservation of biodiversity, water conservation, windbreak and sand fixation, etc.





内蒙古大兴安岭林区72%的森林实行禁止或限制性开发，对生物多样性保护具有不可替代的意义。

72% of the forests in the Greater Khingan Mountains of Inner Mongolia are prohibited or restricted, which is of irreplaceable significance for biodiversity conservation.





内蒙古大兴安岭林区有一、二级河流984条，湿地120万公顷，水资源总量192.6亿立方米，占呼伦贝尔的60.9%、内蒙古自治区的39.6%，是额尔古纳河、黑龙江、嫩江的主要源头。

There are 984 primary and secondary rivers in the greater khingan forest region of Inner Mongolia, with 1.2 million hectares of wetland and 19.26 billion cubic meters of water resources, accounting for 60.9% of Hulunbeir and 39.6% of Inner Mongolia Autonomous Region. It is the main source of Erguna River, Heilongjiang River and Nenjiang River.







良好的森林湿地生态系统在增加碳汇的同时，保护着呼伦贝尔大草原和东北粮食主产区的生态安全，是我国重要的生态安全屏障和森林资源培育战略基地，是维护国家生态安全重要的基础设施，在经济社会发展和生态文明建设中发挥着不可替代的作用。

Good Forest Wetland ecosystem not only increases carbon sink, but also protects the ecological security of Hulunbuir Grassland and the main grain-producing areas in Northeast China. It is an important ecological security barrier and strategic base for forest resources cultivation in China. It is also an important infrastructure for maintaining national ecological security. It plays an irreplaceable role.



## 内蒙古大兴安岭林业碳汇发展与研究

Development and research of forest carbon sink in greater khingan of Inner Mongolia

项目试点

Pilot projects

专业培训

Professional training

交流合作

Exchange and cooperation

科研项目

Research project

天然次生林碳汇

Carbon sink of natural secondary forest



7个林业碳汇试点项目中  
CCER造林项目3个、CCER森林经营  
项目2个、国际核证减排标准（VCS）  
项目2个。

Among the seven pilot forestry  
carbon sinks projects, there are  
three CCER afforestation projects,  
two CCER forest management  
projects and two international  
certificated emission reduction  
standards (VCS) projects.

试点面积共计11万公顷，年均减排  
量为89万tCO<sub>2</sub>e。绰尔VCS项目已经  
完成两次小额交易，交易收入上百  
万元。

The pilot area is 110,000 hectares,  
with an average annual emission  
reduction of 89,000 tCO<sub>2</sub> E. The  
Chaoer VCS project has  
completed two small transactions  
with a revenue of millions of yuan.

## 林业碳汇项目试点 Pilot Forestry Carbon sink Project

序号 NO.	项目名称 Name of pilot project	面积 area (hm <sup>2</sup> )	年减排量 Average annual emission reduction (tCO <sub>2</sub> e)	计入期 Inclusion Period (year)
1	根河森工公司碳汇 造林项目（已备案）	12410	127961	20
2	乌尔旗汉森林经营 碳汇项目	24064	63663	60
3	克一河森林经营碳 汇项目	17362	86594	60
4	满归碳汇造林项目	13095	206701	60
5	金河森工公司碳汇 造林项目	11931	235425	60
6	绰尔国际核证碳减 排标准项目	11000	76000	20
7	克一河国际核证减 排标准项目	20526	90900	30
	合计 Total	110388	887244	/



## 专业培训

组织培训林业碳汇计量监测、碳汇管理、碳交易专业技术人员300多人次，取得国家碳资产管理师、碳资产交易师等岗位认证90余人。

## Professional training

Organization and training of forestry carbon sink measurement and monitoring, carbon sequestration management, carbon trading professional personnel more than 300 people, obtained national carbon asset managers, Carbon Asset traders and other post certification of 90 people.





## 交流与合作

参加了联合国巴黎和摩洛哥气候大会

举办第二届中国绿色碳汇节

举办“碳汇中国”生态摄影比赛

社会企业捐资营造100亩碳汇林

这些活动展现林业在应对气候变化中的重要贡献，传播林业碳汇和低碳生活理念。

## Exchange and cooperation

Participation in the United Nations Climate Conferences in Paris and Morocco

Holding the Second China Green Carbon Sink Festival.

Organizing the Eco-Photography Competition of "Carbon Sink China".

Social Enterprises Donate Funds to Build 100 Mu Carbon Sequestration Forest.

These activities demonstrate the important contribution of forestry in the response to climate change and disseminate forestry carbon sinks and low-carbon life concepts.



## 科研项目

### Research project

#### 《天然次生林经营碳汇项目方法学开发》

Methodological Development of Carbon Sink Project for Natural Secondary Forest Management

#### 《内蒙古大兴安岭林区碳汇计量监测体系建设试点示范项目》

Pilot Demonstration Project of Carbon Sink Monitoring System Construction in Daxing'anling Forest Region of Inner Mongolia

#### 《乌拉其汗森工公司森林经营类碳汇项目试点研究》

Pilot Study on Forest Management Carbon Sink Project of Wuerqihan Forest Industry Company

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## 天然次生林碳汇

### Carbon sink of natural secondary forest

我国森林植被总储碳量为89.8亿吨，其中80%以上的贡献来自于天然林。内蒙古大兴安岭森林面积837万公顷，其中天然林面积815万公顷。

The total carbon storage of forest vegetation in China is 89.8 billion tons, of which more than 80% comes from natural forests. The forest area of greater khingan Mountains in Inner Mongolia is 8.37 million hectares, of which the natural forest area is 8.15 million hectares.

天然林次生林生态系统结构不稳定、生产力低下、木材质量不高、碳汇功能和生物量较低，需要通过经营来提升质量和功能。

Secondary forest ecosystem of natural forest has unstable structure, low productivity, low wood quality, low carbon sink function and biomass. It is necessary to improve the quality and function through management.



内蒙古大兴安岭重点国有林管理局与中国林科院科信所，联合研究编制了《天然次生林经营碳汇项目方法学（版本号V01）》。

"Methodology of Carbon Sink Project for Natural Secondary Forest Management (Version No. V01)" was compiled by Key State-owned Forest Management Bureau of Greater Khingan Inner Mongolia and China Academy of Forestry Sciences Institute of Science and Technology Information.

该方法学为天然次生林碳汇的科学化、规范化发展提供必要的方法学支持和模式借鉴。

This methodology provides necessary methodological support and model reference for the scientific and standardized development of carbon sinks in natural secondary forests.





# 林业碳汇发展存在的问题及建议

Problems and suggestions on forestry carbon sink development





## 存在的问题

碳资产潜力不清，技术体系不成熟

缺乏专项资金支持，社会资本亟待激活

缺乏专业人才引进与培养机制，技术支撑不足

缺乏专业碳资产管理机构，碳汇绿色金融发展不足

## Existing problems

Potential of carbon assets is unclear and technology system is immature

Lack of special financial support, social capital needs to be activated urgently

Lack of mechanism for introducing and training professionals and insufficient technical support

Lack of professional carbon asset management institutions and insufficient development of carbon sink Green Finance



## 建议

完善林业碳汇开发制度体系。

市场主导开展碳汇项目建设。

大力推进林业碳金融发展。

夯实技术人才基础。

## Suggestions

Improve the forestry carbon sink development system.

Market-led carbon sink projects.

We will vigorously promote the development of forestry carbon finance.

Tamping the foundation of technical talents.

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林业碳汇功在当代、利在千秋，是国家减排和应对气候变化战略的重要组成部分。大兴安岭重点国有林区愿与大家携手推进减排事业发展，为减缓气候变化贡献更大的林业力量！

Forestry carbon sink is an important part of the national strategy of reducing emissions and coping with climate change. The Key State-owned Forest Management Bureau of Greater Khingan Inner Mongolia are willing to work with you to promote the development of emission reduction and contribute more forestry power to mitigate climate change.

大兴安岭欢迎您！

welcome to Greater Khingan Mountains !

[Logan2929@163.com](mailto:Logan2929@163.com)

0470-7425425

内蒙古呼伦贝尔市牙  
克石兴安中街29号