



Forest Carbon Sequestration Development Strategy of Beijing



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**Beijing Municipal Bureau of Parks
and Forestry**
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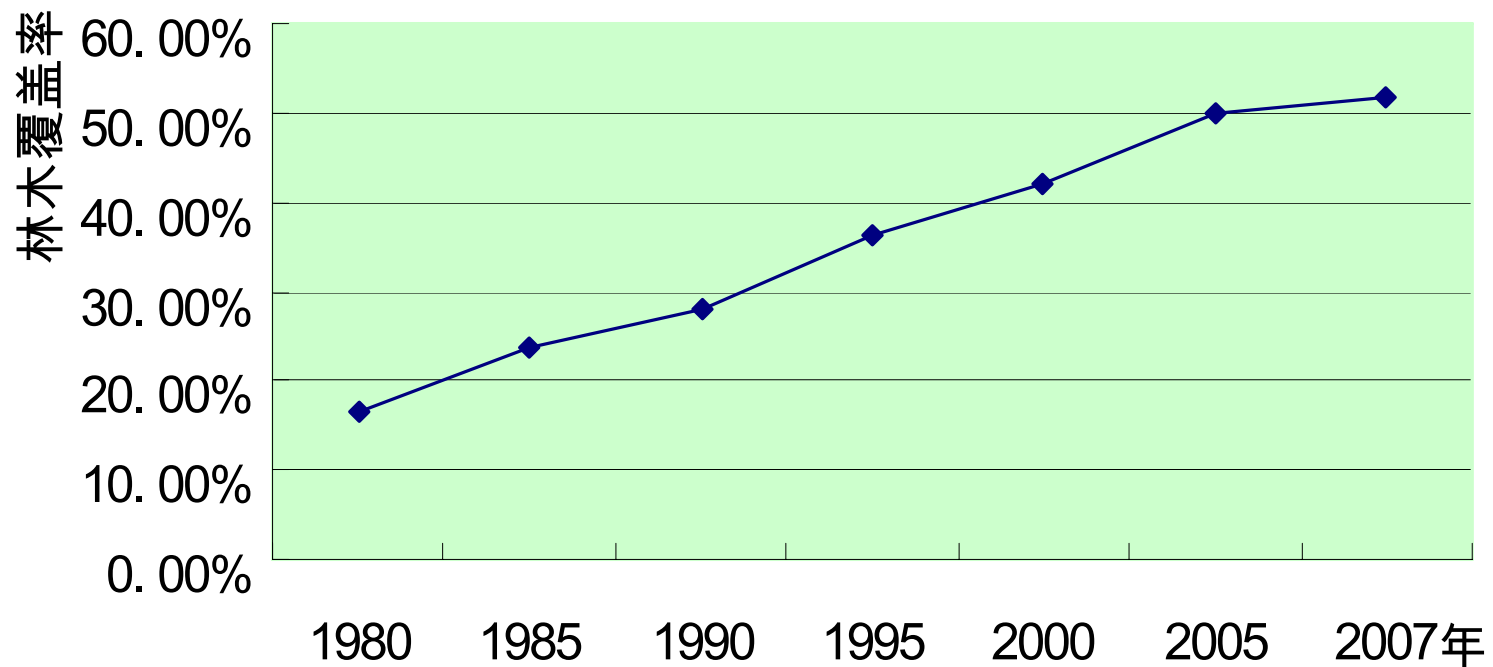
- 1 Significance of forest carbon sequestration development in Beijing.....•
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Significance of forest carbon sequestration development in Beijing

➤ Rapid development of Beijing forestry and impressive increase of forest resource total amount

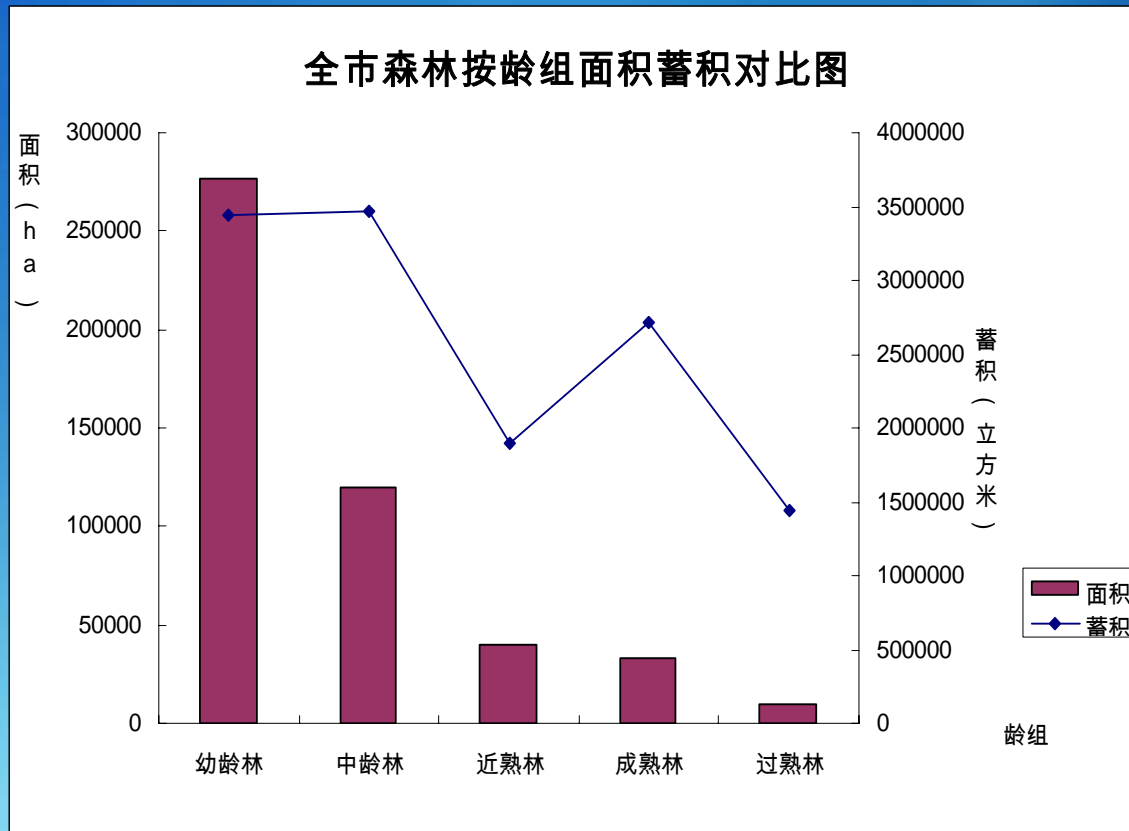
北京市林木覆盖率变化动态





Significance of forest carbon sequestration development in Beijing

- Rapid development of Beijing forestry and impressive increase of forest resource total amount



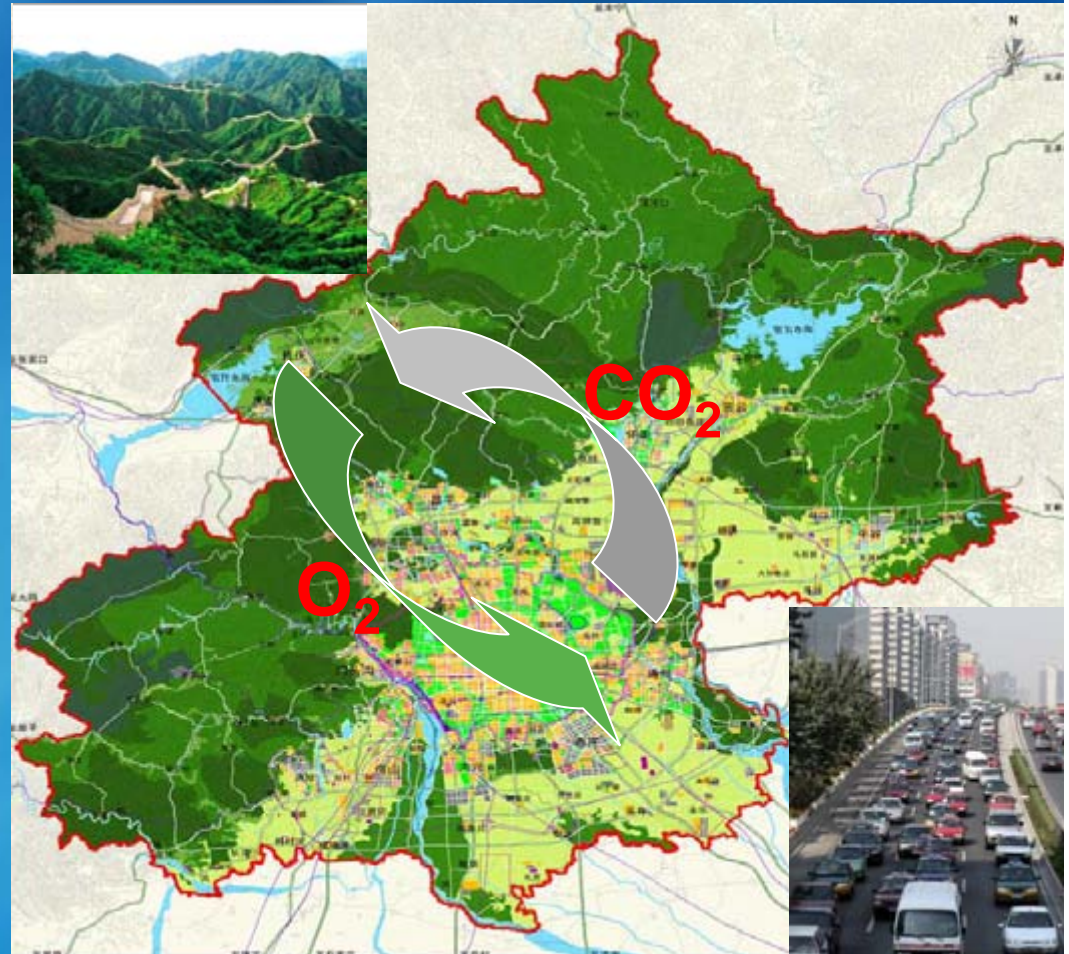
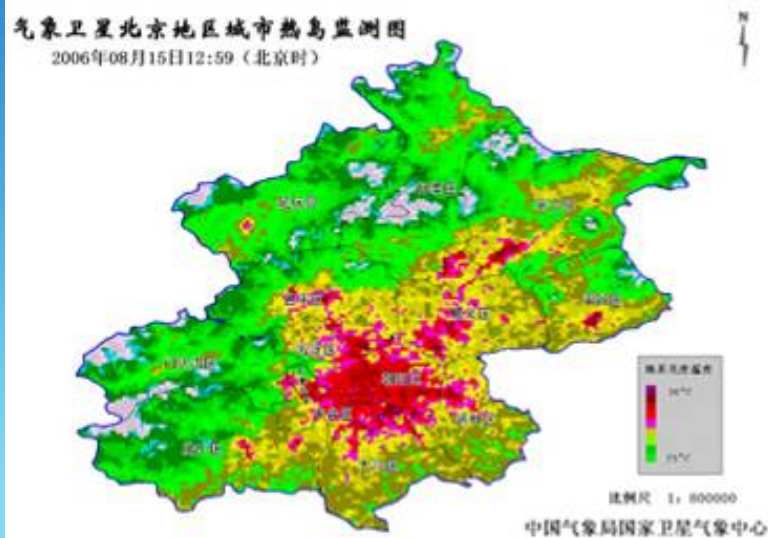
At the end of 2007, the total forestland area in the city has reached 1.0579 million ha, together with the forest tree coverage in the city reached **51.6%** and **forest coverage reached 36.5%**.

Beijing Forest is mainly composed of **public benefit ecological forest**, that contributes greatly to Beijing's environment.



Significance of forest carbon sequestration development in Beijing

- ✓ Beijing Municipality has a total area of 16.4 thousand Sqkm, in which mountains take 61.4% ;
- ✓ up to 2007, total population of Beijing is 16.33 million composing of 10.30 million in downtown and 500 million in rural area: **density in downtown is 63 times in rural area.**





Significance of forest carbon sequestration development in Beijing

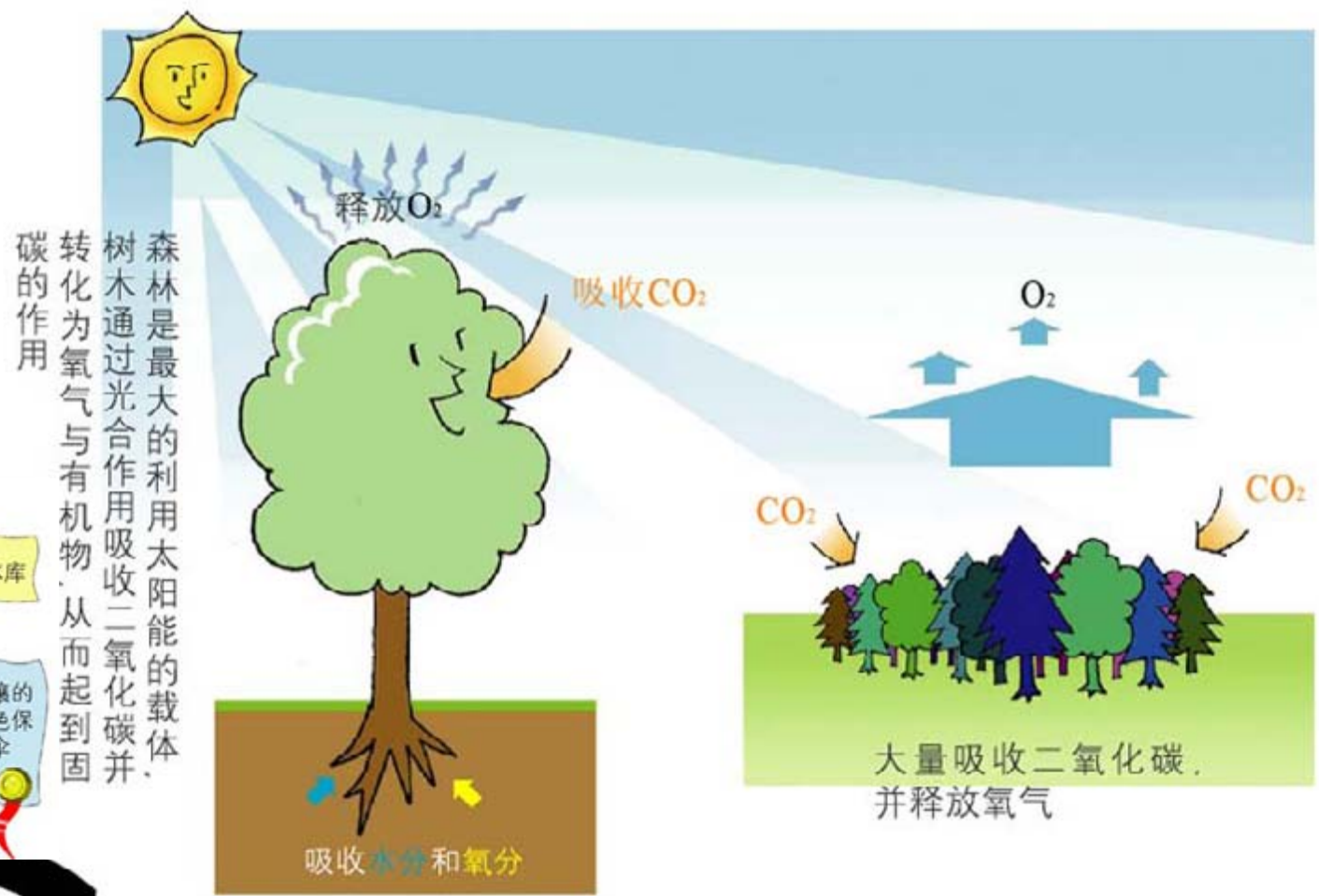
✓ Gap between the rich and the poor in downtown and rural area dramatically widens along with rapid social economic development.





Significance of forest carbon sequestration development in Beijing

➤ Carbon sequestration: easier measuring eco service





Significance of forest carbon sequestration development in Beijing



- ➡ A exclusive option to balance regional development;
- ➡ The necessity to build a ecological livable city of Beijing;
- ➡ Provide demonstration for the carbon sequestration development in other parts of China;
- ➡ Fulfill the "China National Blueprint on Addressing Climate Change" and "China Short and mid term Lay-out Program of Development of Science and Technology". To improve the capacity of carbon sink and emission reduction of forest eco system.



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Status quo of forest carbon sequestration development



Carried out studies on forest eco-service value and preliminarily made clear the carbon storage in forest resources in Beijing

Up to 2007, the total carbon storage in forest resources in Beijing was 110 million tons, the annual increase of carbon storage in forest resources (carbon sequestration) is approximately 9.72 million tons and annual release of oxygen is approximately 7.1 million tons.



Sample land investigation



Plant community investigation



Status quo of forest carbon sequestration development

- Studies on forest carbon sequestration are carried out in succession





Status quo of forest carbon sequestration development

Studies on forest carbon sequestration are carried out in succession



Field and laboratory observation



Set permanent sample land





➤ Studies on forest carbon sequestration are carried out in succession

类型	单位面积碳储量 (吨/公顷)	单位面积年碳汇量 (吨/公顷/年)
人工柞树林	10.57	6.51
天然柞树林	11.02	7.21
人工杨树林	29.96	8.50
天然山杨林	13.09	10.70
人工侧柏林	8.78	2.14
天然侧柏林	11.83	3.58
人工油松林	22.13	3.95
天然油松林	19.72	5.20
人工落叶松林	13.37	10.22
人工刺槐林	11.76	13.98
天然桦树林	18.62	7.21



Status quo of forest carbon sequestration development

- ✓ In 2008, Beijing Municipal Bureau of Parks and Forestry officially initiated "SINOPEC Carbon Sequestration Project of





The Decision makers particularly emphasized and actively promoted forest carbon sequestration work



➤ In May 2008, Mr. Liu Qi, the Secretary Municipal Committee of the CPC and Mr. Guo Jinhua, the Vice Chairman of the



2009-2-25



The Decision makers particularly emphasized and actively promoted forest carbon sequestration work

- Multiple participation in discussion on improving it





The Decision makers particularly emphasized and actively promoted forest carbon sequestration work

- In Aug 2008, the Vice Executive Mayor of Jilin attended the Opening Ceremony of China Beijing Environment Exchange, etc.





Formed a platform for public participation

✓ China Green Carbon Fund has been established in 2008, though which website public could join in carbon compensation.



2009-2-2



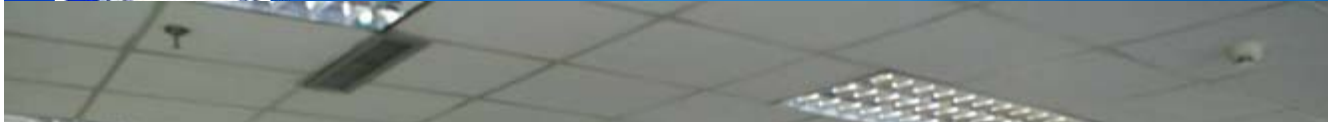
Publicity of forest carbon sequestration moving on smoothly

✓ In March 2008, the large public transportation publicity campaign “Eco-science Popularization and Forest Sequestration” was launched in Ditan Park.”





Publicity of forest carbon sequestration moving on smoothly



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Publicity of forest carbon sequestration moving on smoothly

4 北京日报

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1100多个社区健康服务团队为“片儿医”:京城

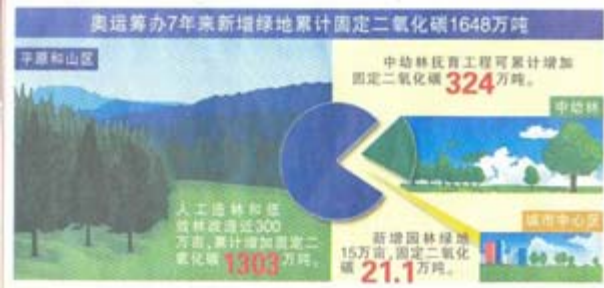
■本报记者 王海燕

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奥运筹办7年来,城市中心区新增园林绿地15万亩,平原和山区人工造林及低效林改造近300万亩,抚育中幼林300万亩 北京新增绿地固定二氧化碳1648万吨



本报(记者王海燕)森林不仅能够涵养水源、防风固沙,还具有强大的“碳汇”功能。记者从北京市园林绿化局了解到,奥运筹办7年来,北京市新增园林绿地15万亩,平原和山区人工造林及低效林改造近300万亩,抚育中幼林300万亩,累计固定二氧化碳1648万吨。

1303万吨二氧化碳,释放142吨氧气。目前,通过林业碳汇项目,减少大气中的二氧化碳浓度已成为国际公认的气候变化有效途径。

北京市2001年举办奥运会以来,认真践行“绿色奥运”理念,大力推进城市绿化、平原和山区造林绿化工作,林木、草地资源总量大幅增长,初步建成了“城市青山环绕,山区森林环抱,郊区绿带田畴”的优美景观。在改善生态环境质量的同时,也大大降低了空气中二氧化碳浓度,减少了温室效应。

据统计,城市中心区7年间新增园林绿地15万亩,树木2221万株,草坪465.3万平方米,使人均绿地达到40平方米,城市人均公共绿地达到12.6平方米,实现固定二氧化碳21.1万吨。

平原和山区实施了京津风沙源治理、三北防护林、太行山绿化、绿色通道等重点项目,截止2007年,人工造林和幼林改造近300万亩,林木绿化率达到了51.8%,森林覆盖率达到了35.5%,初步建成了绿化隔离带、平原、山区三道绿色生态屏障,实现了累计增加固定二氧化碳1200万吨。

7年间,本市还重点对300万亩健康情况不佳的中幼林进行了抚育,调整了林分密度,优化了林分结构,改善了林木生长环境,提高了森林质量。通过研究和实践,经过抚育的森林每亩地每年可增加固定二氧化碳0.36吨,整个中幼林抚育工程累计增加固定二氧化碳324万吨。

名词解释

碳汇:从大气中清除二氧化碳的过程,也称为碳汇。

森林碳汇:是指森林植物通过光合作用将大气中的二氧化碳吸收并固定在植株与土壤当中,从而减少大气中二氧化碳浓度的过程。

林分碳汇:是指利用森林的增碳功能,通过抚育措施,如抚育间伐管理,减少疏林、保护和恢复森林植被等途径,吸收和固定大气中的二氧化碳,并按照相关规定与碳汇交易相衔接的过程,也称为碳汇。

新稿/稿 2008

本市筹建碳汇基金 征集购买碳汇企业

本报讯(记者 黄建华)北京市森林资源总碳储量为1.1亿吨,森林资源年固定二氧化碳量为967万吨,年释放氧气量为706万吨。昨天,记者从市园林绿化局了解到,园林绿化局和中国科学院地理科学与资源研究所合作,组织了以李文华院士为首的近20名专家学者,对北京市森林资源的碳储量进行了系统研究,结果表明,绿化覆盖率、林木质量好的怀柔区森林年固定二氧化碳量和年释放氧气量为全市之冠。(下转 A6 版)

■主编/刘峰 ■编辑/宋建华 袁祖君 ■责编/司徒晓春 ■校对/李鑫

2009-2-25

尊重 创造 合作 共享



Specific trainings of forestry carbon sequestration organized regularly

- Rounds of forest carbon sequestration training activities were organized by Beijing Municipal Bureau of Parks and Forestry in 2008





Public Joining in Carbon Compensation



✓ The first zero-emission call
for in Beijing



2009-2-25

The first carbon buyer in
Beijing



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Public Joining in Carbon Compensation



- School students of Beijing joined in "Joining in carbon compensation, eliminating your carbon emission" event





Public Joining in Carbon Compensation

- In Beijing Municipal Bureau of Parks and Forestry, the event of “facilitating green Olympics, joining in carbon compensation”



2009-2-25

尊重 创造 合作 共享

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Challengers in forest carbon sequestration development in Beijing



➤ Public unfamiliar with carbon sequestration



What and where is
carbon
sequestration ?



Challengers in forest carbon sequestration development in Beijing



➤ Insufficient studies on forestry carbon sequestration concerning theories, technology and policies :

- ☹ Lack of methods and criteria of forestry carbon sequestration measuring, monitoring, certification, Check and others;
- ☹ Lack of rules and policies of carbon sequestration administration and trade ;
- ☹ Lack of technical criteria of carbon sequestration afforestation, management and sequestration increase control in Beijing region.◦



Challengers in forest carbon sequestration development in Beijing



➤ Insufficient forest eco system compensation mechanism





Challengers in forest carbon sequestration development in Beijing

➤ Low forest carbon sequestration function

- forest resource quality, insufficient forest carbon sink function

CONTENT REGION	Per volume (M ³)	Carbon storage (ton/ha)
Global forest cover	99.85	71.5
China forest cover	71.21	44.9
Beijing forest cover	28.57	21.0



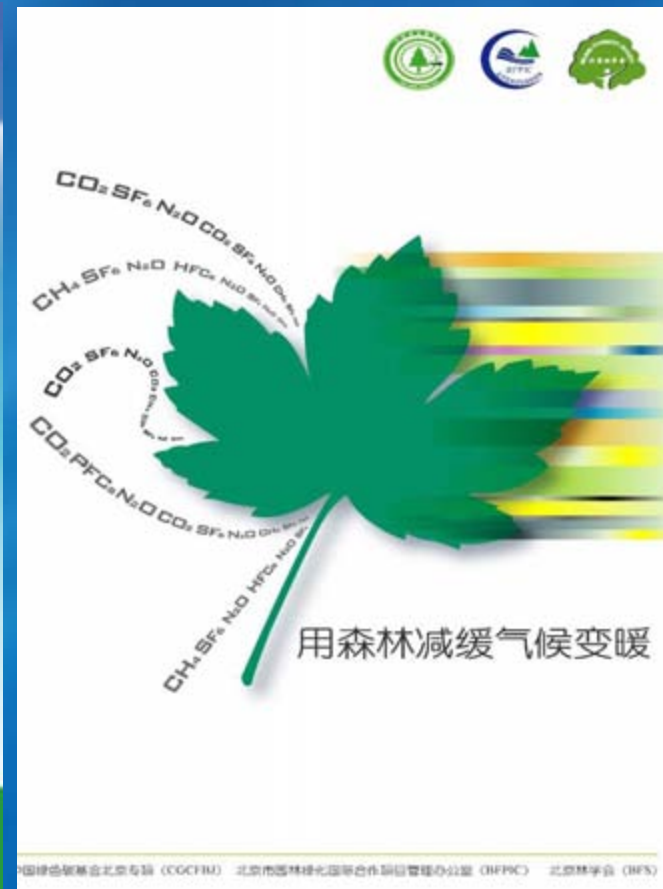
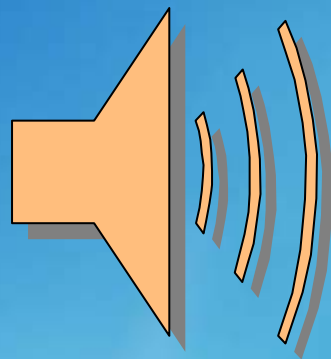
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Countermeasures of forest carbon sequestration development in Beijing

- More attention paid to carbon sequestration concerning publicity, training and application of sequestration increase technology.





Countermeasures of forest carbon sequestration development in Beijing

Carry out theoretic study on forest carbon sequestration and pilot demonstration

- Research and set up the methodology system of forest carbon sequestration measurement, monitoring and evaluation in Beijing;
- Study the fundamental theory of forest carbon sequestration, sequestration increase adjustment and control technology, and set up demonstration area;
- Explore to set up carbon flux monitoring network of forest ecosystem in Beijing;
- Study and formulate carbon trading management policy of Beijing and relevant rules;
- Gradually complete and improve the introduction, management and implementation procedures of carbon sequestration project, as well as promote effective implementation.



Countermeasures of forest carbon sequestration development in Beijing



➤ Complete and improve the forest eco-benefit compensation mechanism in Beijing

- The carbon sequestration capacity is an important index to evaluate healthy development of forest eco-system ;
- Combine the collective forest tenure system reform and promote the formulation of eco-compensation policy with forest carbon sequestration benefit compensation as the threshold and main evaluation index ;
- Implement **fundamental compensation** on the basis of rights and interests of rural collective-owned economic organizations and farmers' as the owner of ecological forest in mountainous area, and **efficiency compensation** on the basis of carbon sequestration value due to changes in size and quality of ecological forests.



Countermeasures of forest carbon sequestration development in Beijing

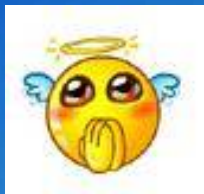
- Improve forest healthy management, to increase forest stands quality and forest carbon sequestration
- A afforestation programme in 45 thousand ha of barren land launched, and healthy management on 460 thousand ha of low function public benefit forest started.



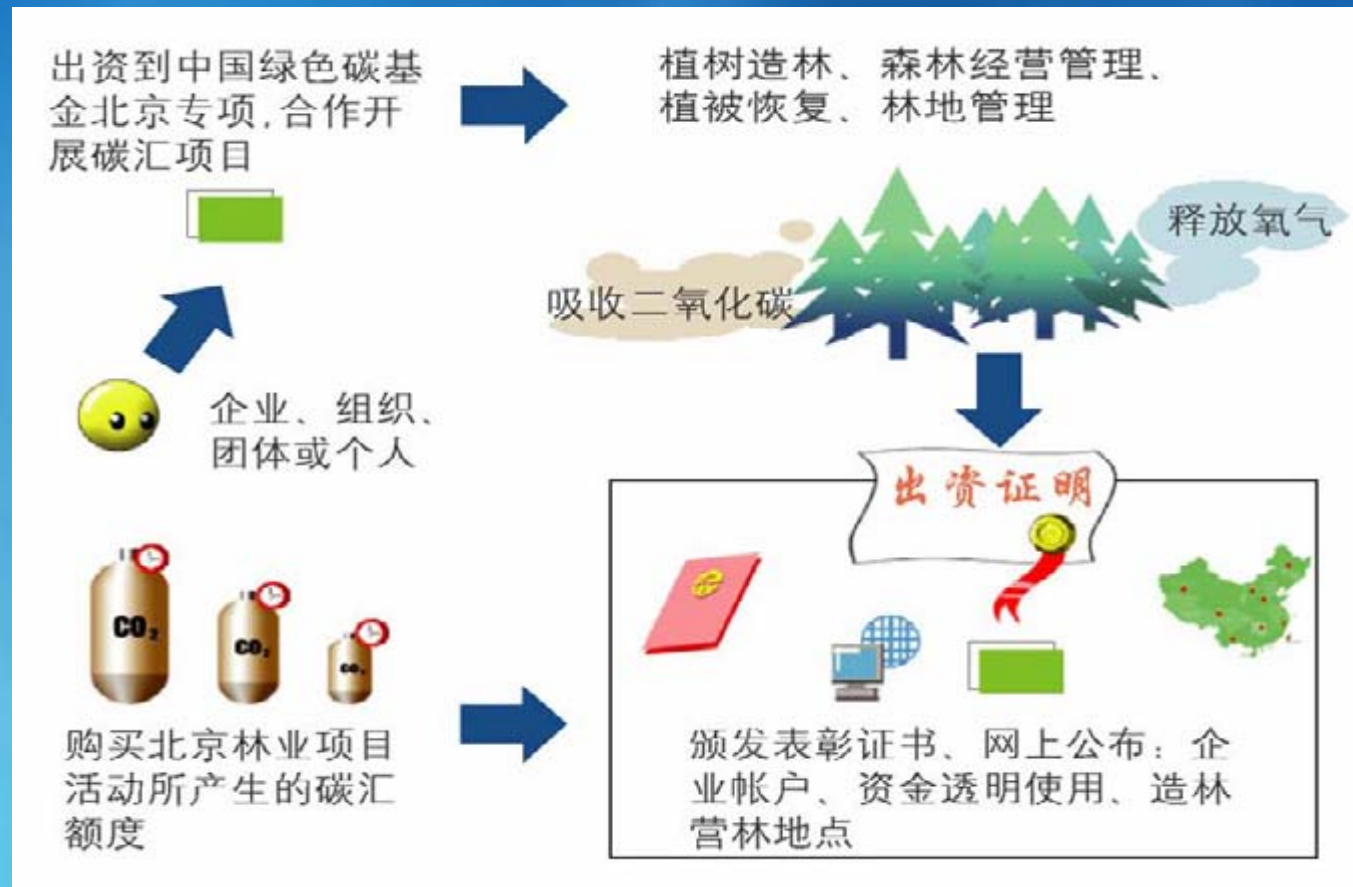


Countermeasures of forest carbon sequestration development in Beijing

- Facilitate carbon compensation in Beijing through the China Green Carbon Fund Beijing Project



Participate in carbon offset, eliminate carbon footprint !





Countermeasures of forest carbon sequestration development in Beijing

- Strengthen international cooperation, facilitate carbon sequestration development





Thanks!

Please visited these websites
for more information :

www.bfdic.com

www.bjfs.org.cn

