Forest Carbon Market for Financing Nature Practices in China

QIAN Guoqiang
SinoCarbon Innovation & Investment Co., Ltd.
Understanding Forest Carbon

Forest Carbon is an eco-product:

◆ Function: carbon offsets that brings eco benefits
◆ Demand: government, business, individual
◆ Generation: generated according to certain policy, standards or methodology
◆ Labelling: CCER, VCS, Gold standard, FFCER, PHCER, etc.
◆ Markets: national or regional carbon markets, offsetting markets, voluntary markets

Forest Carbon

Government

- Achievement of carbon neutral objective
- Regional targets joint implementation

Business

- Business has diversified carbon neutral targets or carbon emission reduction programs
- Different types of forest carbon products meet different purposes
Overview of Forest Carbon Market

What is the landscape?

Wide enthusiasm, lack of unified policy and rules, separate markets

- **Buyer**: Business and governments that committed carbon neutral
- **Seller**: poised to get into the market but mostly not clear how?
- **Policy under development**: project types, methodologies, standards, rules for international transfer
- **Market**: fragmented, visible but not within reach
- **Society**: confused perception, investors anxiety and market bubble

Carbon neutral commitment creates demand on top of other voluntary source, which provides a good channel for investing nature. In china, this is widely recognized as nature base solutions (NBS).
Forest Carbon Project development under typical schemes

Some of the forest carbon schemes:

- CDM afforestation and reforestation
- Verra (VCS)
- The Gold Standard
- China CCER
- Domestic local schemes, FCER/PHCER

There are others schemes in different jurisdictions, and more are likely to emerge!
China Certified Emission Reductions (CCER) scheme endorses 16 project types, including afforestation, reforestation and forest management projects. CCER suspended in March 2017, and expected to re-operate in 2022.

- **97** projects in pipeline, 68 afforestation projects, 24 forest management projects, 5 bamboo projects
- **13** registered, with annual emission reduction of 1.87 million tons
- **3** issuance projects, 828 thousand tons of CCER issued in total
• 63 in pipelines
• By 2025, 15 million tons of emission reductions units
How much forest carbon?

Carbon sink of 2014:

- LULUCF sector in 2014 is 1.151 billion tons of eCO2
- Forest, farmland, grassland, wetland absorbs 840, 49, 109, 45 million tons of eCO2 respectively
- LULUCF measured by IPCC inventory guidelines, the data only reflects macro forest carbon removals, different from tradable forest carbon

Estimation:

China is having national plan to improve forest coverage and forest carbon stock volumes. Forest carbon sink could reach 1 billion tons of CO2, and by 2060 roughly 930 million tons of eCO2

Estimated by SinoCarbon
How much forest carbon?

- 50 million hectares of forestation-suitable land, 11% is good quality, 37.6% medium quality.
How much forest carbon?

- Forest rich does not equal to rich in tradable forest carbon
- Forest management is another key measure to increase forest carbon sink
- Forestation-suitable land is the key potential
How much forest carbon?

Estimation on Macro level:

Forest carbon from newly afforestation:
266 million hectares (40 million Mu) of newly afforestation every year, estimated by 0.7ton/Mu/year, produces 28 million tons of forest carbon.

Forest management:
179.88 million hectares of high forest, if all managed, estimated by 0.3tons/Mu/year, produces 810 million tons of forest carbon.

Forest carbon stock ≠ Forest carbon
Forest carbon ≠ Tradable forest carbon
Incentive not enough under low price but price is expected to rise

CCER price ranges from RMB 1-40 per ton, most in the range of 10-25 RMB, higher than other units

VCS ranges from 1-12 USD/ton, most lower than 1 USD per units

Source: SinoCarbon CCER pipeline

Source: Voluntary Carbon Markets Insights
# 58 Parties have pledged Carbon Neutrality

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Major International Companies have set Carbon Neutral Targets

- MODERN SERVICE INDUSTRIES, SUCH AS IT, RETAIL, FINANCE, AND MANUFACTURING, GENERALLY HAVE CARBON NEUTRAL TARGETS SET EARLIER THAN THEIR RESPECTIVE COUNTRY'S TARGET.

- COMPANIES IN THE ENERGY INDUSTRY (POWER, OIL AND GAS) HAVE A RELATIVELY LATE COMMITMENT TO CARBON NEUTRALITY, BUT GENERALLY NO LATER THAN 2050.

2025~2030
- Bayer
- Apple
- Siemens
- GE
- Accenture
- IKEA

2031~2040
- Rhine group
- Amazon
- Mercedes-Benz
- e-on

2041~2050
- Dow Chemistry
- BP
- Volkswagen
- Rio Tinto
- Vale
Article 6 of Paris Agreement establishes framework of a global carbon market

- Article 6.2: Rules for transferring ITMOs
- Article 6.4: Rules, procedure and modalities for a new scheme generating carbon credits

Emission reduction outcomes under different jurisdictions are to be recognized and transferred for different purposes, including fulfilling NDCs and voluntary purposes
Is there a way beyond the market?

The Paulson Institute, in partnership with Tsinghua University, on Tuesday announced the winners of the 2021 Paulson Prize for Sustainability.

A carbon sink project in East China’s Fujian Province and an air conditioner maker based in East China’s Jiangsu Province claimed the prestigious annual awards.

The Forest Eco Bank and Carbon Sink Project by of Shunchang State-owned Forest Farm was awarded the Prize in Nature Stewardship for its sustainable forest management practices and innovative financing models that maximize ecological and social benefits.
项目选择顺昌县建李登卡的碳汇林种植者，按照科学的方法测算出2008年以来（集体林权改革后）碳汇林（包括乔木林和竹林）所产生的碳汇量，依托微信平台完成“一元碳汇”小程序的上线运行，只要通过微信扫描二维码，平台主页就能显示参与该项目的林农或村集体碳汇林情况。首次实名认证后，即可按1元/千千克碳汇量的价格，自愿认购林农或村集体的碳汇产品，并获得相应的积分和碳汇证书。认购的资金将进入专设的账户，专项支持脱贫户的增收和绿色生态建设，形成保护生态的良性循环。

项目将囊括全县12个乡镇、28个脱困村和1404户脱贫户的林木资源，共策划实施12个碳汇项目，总面积11.5万亩，项目活动期30年，碳汇总量达142.5万吨，首期（前10年）核算上线交易量47.5万吨，按照“一元碳汇”销售价（一元10千克），可实现收益4750万元。

“一元碳汇”，让“绿库”变成“金库”，让林农变成“卖炭翁”，让全社会共同践行绿色低碳行为。

“一元碳汇”，期待您的参与！
THANKS

谢谢

QIAN Guoqiang
SinoCarbon
+86-134-6668-7939
qianguoqiang@sino-carbon.cn