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Guangdong Carbon Market

A New Area for Green Investment



China Emissions Exchange

October 23, 2015

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1. Introduction to the China Emissions Exchange (CEEX)

1.1 Trading Platform

Comprehensive Trading Platform

- National CCER voluntary emissions trading
- Guangdong Province carbon emissions trading
- Innovation in carbon finance
- GSP implementation
- Pilot project for energy savings

Partnership between the Province and the City

It was officially launched on September 11, 2012. The Guangzhou Exchange Service Group Co. Ltd held all the shares.

Registered Capital

100 million CNY

广东省人民政府

粤府函〔2012〕186号

关于同意广州碳排放权交易所注册设立的批复

中华人民共和国国家发展和改革委员会

发改办气候〔2013〕92号

国家发展改革委办公厅关于同意广州碳排放权交易所有限公司为自愿减排交易机构备案的函



1.2 Strategic Goals

Goals:

Build a first-class carbon emissions exchanges within three years

Build a professional platform for national environmental equity capital markets and services within five to eight years

Measures :

- For the existing trading products, measures will be taken to enhance its trading volume;
- CEEEX will also serve the economy, promote the development of the complementary mechanisms such as forest carbon sink, energy efficiency projects, conservation in construction projects and transportation emission reduction;
- CEEEX also needs innovation in carbon finance. It will develop green investment and financing platform and new products such as the carbon futures and options.



2. Market Review Of the CEEX

2.1 Platform Building and Trading Mechanism Development

Institutional Design

We are an important member of the Carbon Trading Management and Transaction Working group and we actively participated in carbon emissions trading mechanism design:

(1) “Rules and Regulations for CEEX Trading”

(2) "Interim Measures on Members Management of CEEX”

System Development

Establish a secure, convenient and efficient electronic trading system of allowance and CCER

Connection to multiple systems

1) The provincial allowance registration system

(2) The bank clearing system

(3) The provincial non-tax finance system

(4) The national voluntary emissions trading registration system.

Rules and Regulations

The risk control system

(1) Price Limit

(2) Monitor abnormal transactions

(3) information disclosure

We also standardized the new account processing.

2.2 China's First Allowance Auction



On December 16, 2013, we hosted china's first auction of carbon emissions allowances and got oversubscribed 1.69 times. As of October 22, we hosted ten allowance bidding and the amount reached 14.86 million tons while the turnover reached 773 million CNY.

Allowance Auction in Primary Market in Guangdong Province

auction date	allowance offered for auction(tons)	transaction amount (tons)	deal price/floor price	total bidders	total bidders
2013.12.16	3000000	3000000	60/60	56	28
2014.1.6	5000000	3892761	60/60	46	46
2014.2.28	2000000	1130557	60/60	24	24
2014(4.3,4.17,5.5)	3600000	1737151	60/60	80	80
2014.6.25	1865000	1362870	60/60	46	46
2014.09.26	2000000	2000000	26/25	33	19
2014.12.22	1000000	701442	30/30	12	12
2015.03.27	1000000	422461	35/35	7	7
2015.06.10	3000000	314643	40/40	2	2
2015.09.21	300000	300000	16.1/—	19	4

Participants



compliance company



new project



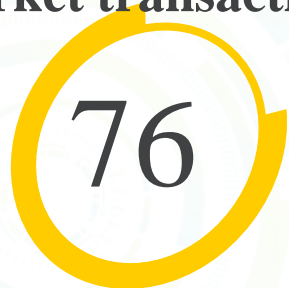
investment institutions

2.3 Secondary Market: Continues to Be Active

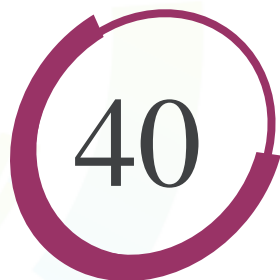


- The accumulated transactions in the secondary market reached 8.25 million tons and the turnover reached 186 million CNY.**

Participation in secondary market transactions



compliance company



individual investors



investment institutions

(As of Oct. 22nd, 2015)

Primary market: 70
Secondary market: 28

power

电力行业

Primary market: 58
Secondary market: 29

cement

水泥行业

iron and steel

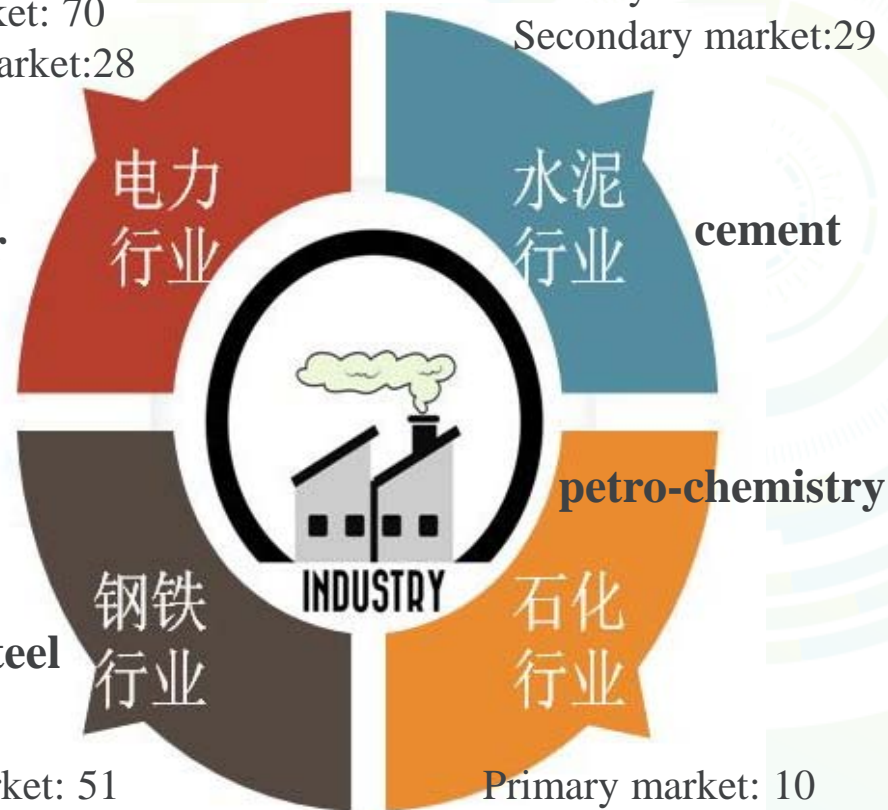
钢铁行业

Primary market: 51
Secondary market: 13

Primary market: 10
Secondary market: 6

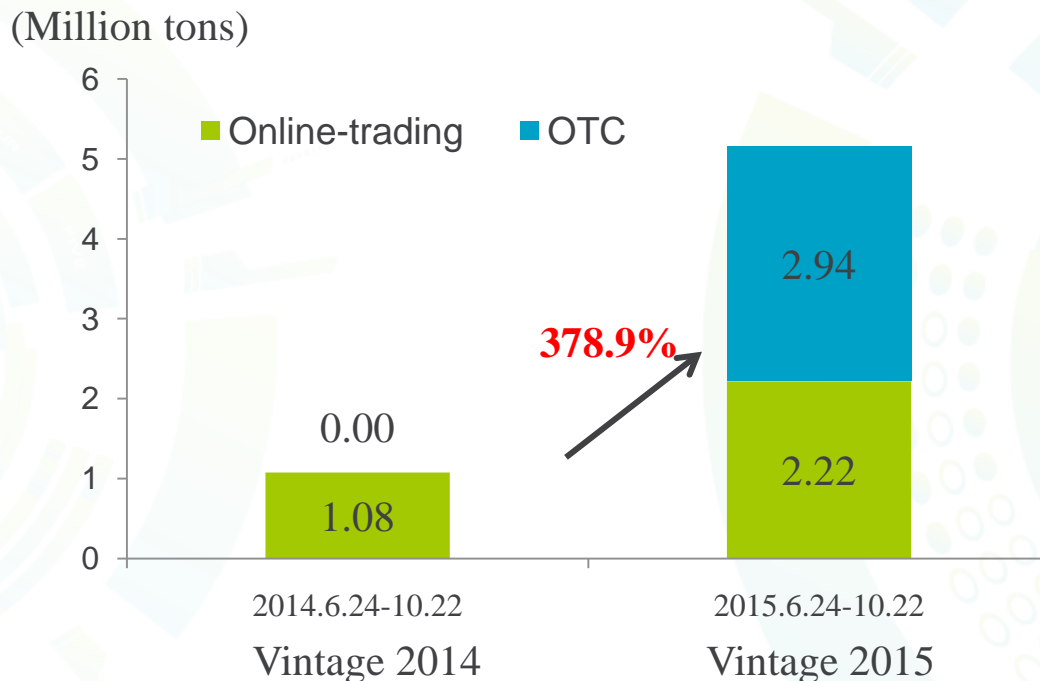
petro-chemistry

石化行业



2.3 Secondary Market: Continues to Be Active

Guangdong Vintage 2015 : Jun. 24th- Oct. 22nd



- **A number of reasons behind the stronger market performance:**
- ✓ **Mechanisms of Guangdong-ETS improved (Allowances supply tightening, switch from an allowance allocation system)**
- ✓ **Provision of trading services especially carbon financial innovation**
- ✓ **Carbon assets management capabilities of entities and institutions enhanced**

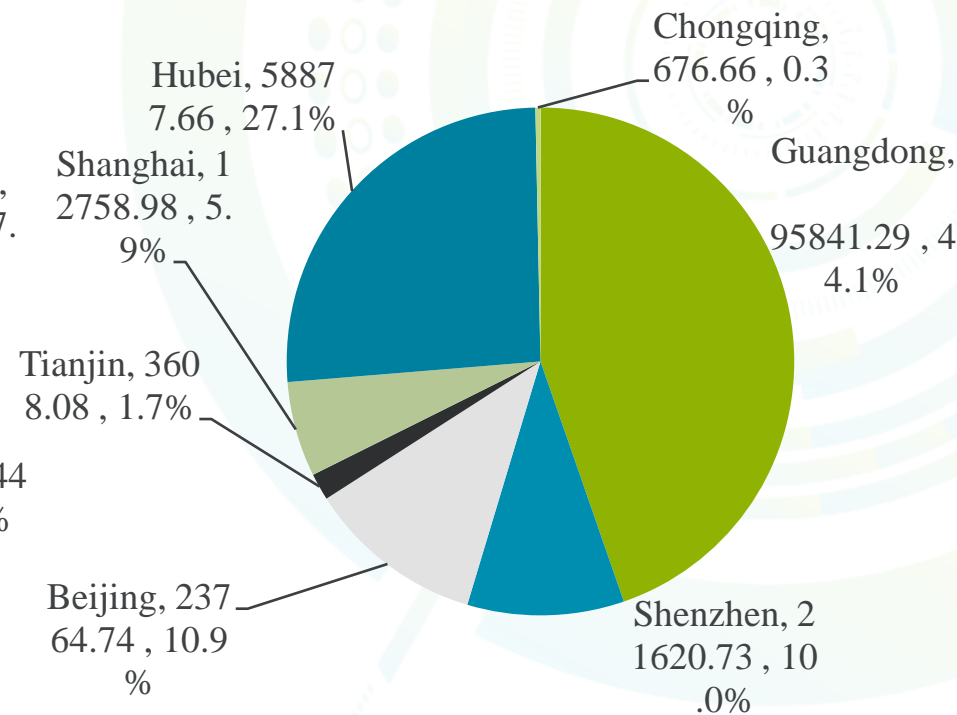
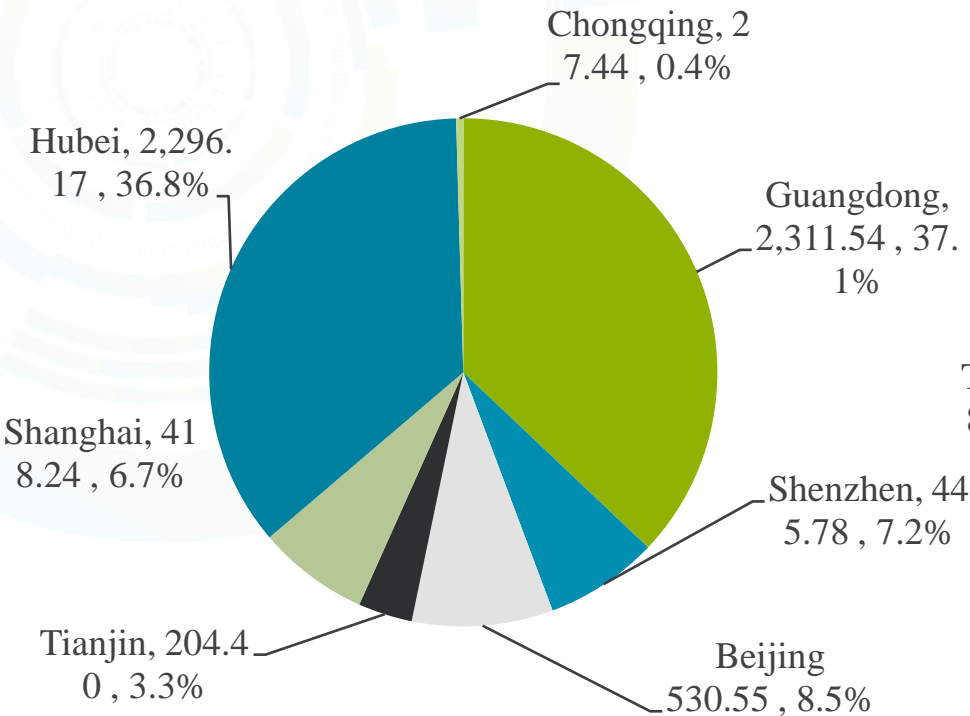
2.4 National Carbon Market Transactions



As of Oct. 22nd, 2015, 23,115,409 tons were traded on the Guangdong provincial allowance auction trading market, accounting for 37.1 of all ETS pilot projects. The turnover was 958 million CNY, accounting for 44.1% of the national total.

Transaction shares of pilot markets
(as in 10,000 tons)

Turnover shares of pilot markets (as
in 10,000 yuan)



(As of Oct. 22nd, 2015)

2.5 CCER Trading in Guangdong



**The first CCER
online trading:
volume 200,000
tons**

**March
9, 2015**

**As of
Oct.
22, 2015**

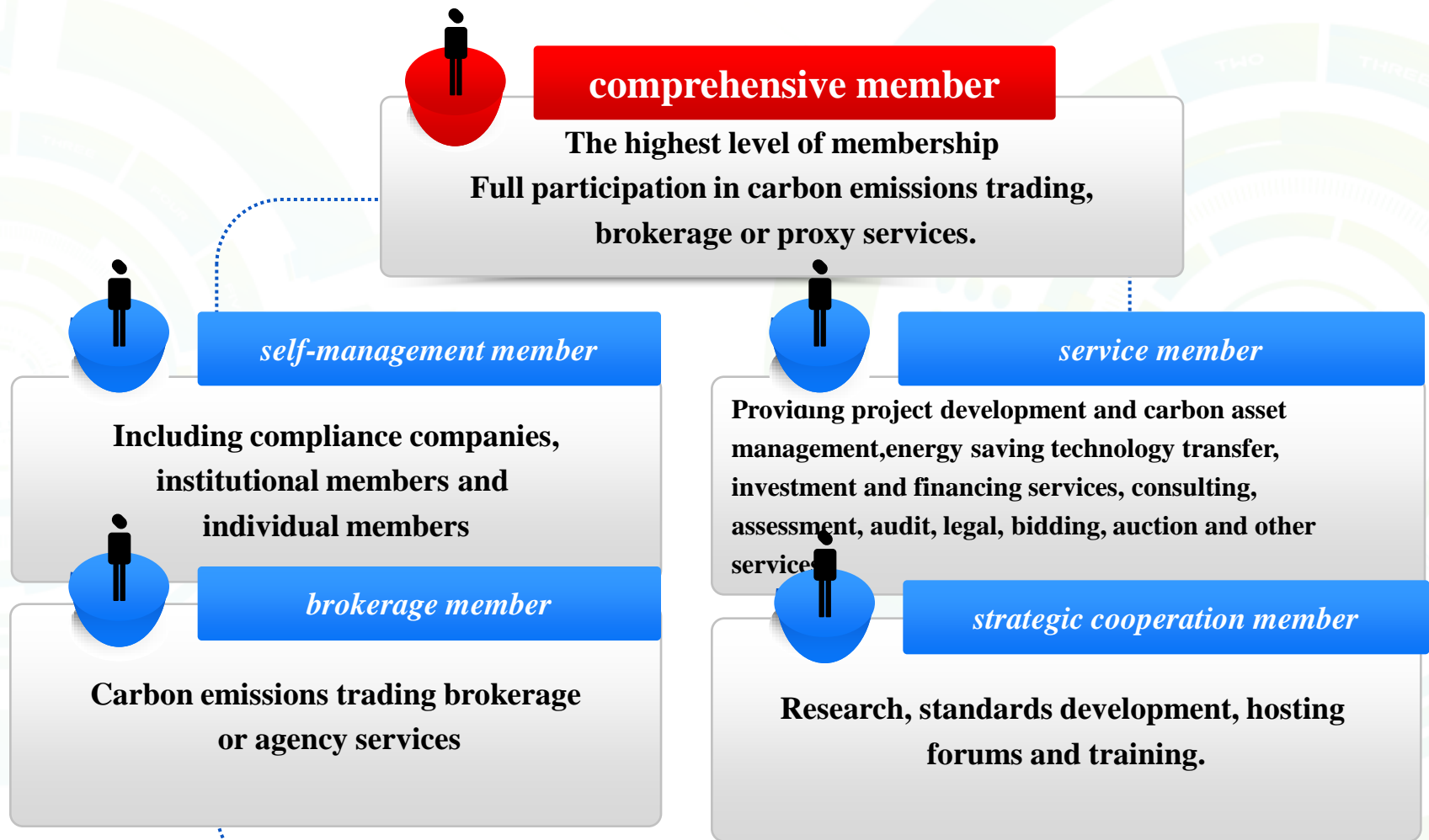
Jan, 2013

The CCER projects willing to join the carbon trading in Guangdong amounted to over 10 million tons of carbon emissions.

We push forward the existing projects and the CCER transactions totaled 1,011,000 tons.

We were also approved by the National Development and Reform Commission to become one of the five voluntary greenhouse gas emissions trading mechanisms.

2.6 Membership Structure



participate directly in transaction

not participate directly in transaction

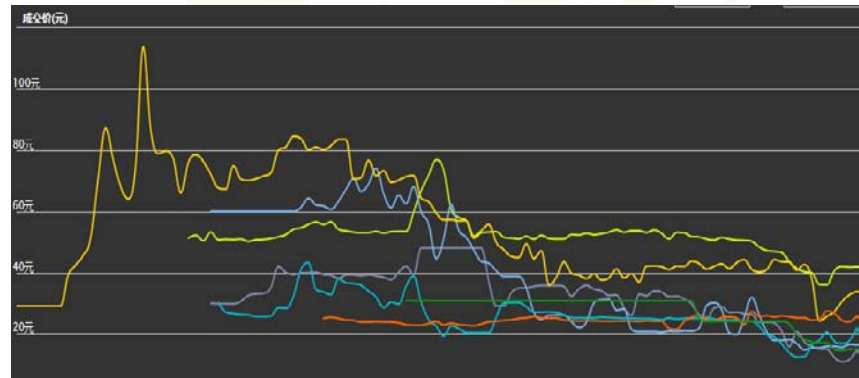


3. Guangdong Experiences in Carbon Trading

3.1 Multi-level Market



- Guangdong focuses on the coordinated development of the primary market and the secondary market. It is the only pilot project in China to issue free and auctioned allowances. It is also the country's largest and only allowance auction platform.



- In addition to the primary and secondary markets, we introduced long-term carbon trading rules and deferred transaction of spot. We follow the requirements of the state and the Free Trade Zone to study the feasibility of the carbon futures and try to enrich the market.

3.2 Diversified Modes of Trading



- **Fixed-price, simplest mode of auction**
- **Close auction, ensure the maximum trading volumes with fairness in consideration**
- **Listing bid, the best efficiency mode of trading**
- **Listing for click, widely adopted mode with semi-automated match**
- **One-way bidding, seller's market, disposal of default assets**
- **Negotiating transfer, block trade, more flexible price**

3.3 Modified System

- Guangdong continues to modify the regulation system and carry out allowance distribution, MRV as well as risk prevention and control with high standards.



Optimization

The allowance distribution will be optimized and the allowance auction will be improved.



Adjustment

The listed trading, delivery and settlement will be adjusted



Modification

The new carbon emission trading rules will be published to improve the transaction means

3.4 Internationalized Market

➤Quantities of foreign-capital members: 3

➤Trading performance of foreign members

As of Oct. 22nd ,2015, 3,414,547 tons allowance and 251,000 CCER were traded by foreign members in secondary market, accounting for 41.4% and 24.8% of Guangdong-ETS.

➤ Improved the compatibility of CEEEX during the process of serving foreign member

➤ Enhance International and domestic cooperation



3.5 Active investment institutions

	Number of Transactions	Volume	Transaction amount
Investment institutions	46.80%	81.40%	39%
Individual investors	55.50%	3.10%	3.30%

Individuals

- Annual fee deducted for over 3,000 tons of trade

Investment Agencies

- 50% annual fee reduction and one free training opportunity for over 100,000 tons of trade
- 100% annual fee reduction and two free training opportunities for over 200,000 tons of trade

Handling fee

- The handling fee was reduced from 5 ‰ to 2 ‰

Better CCER Transaction Modes



CCER initial transfer from the account of the transferee to that of the recipient

Neither parties need to re-open bank accounts.

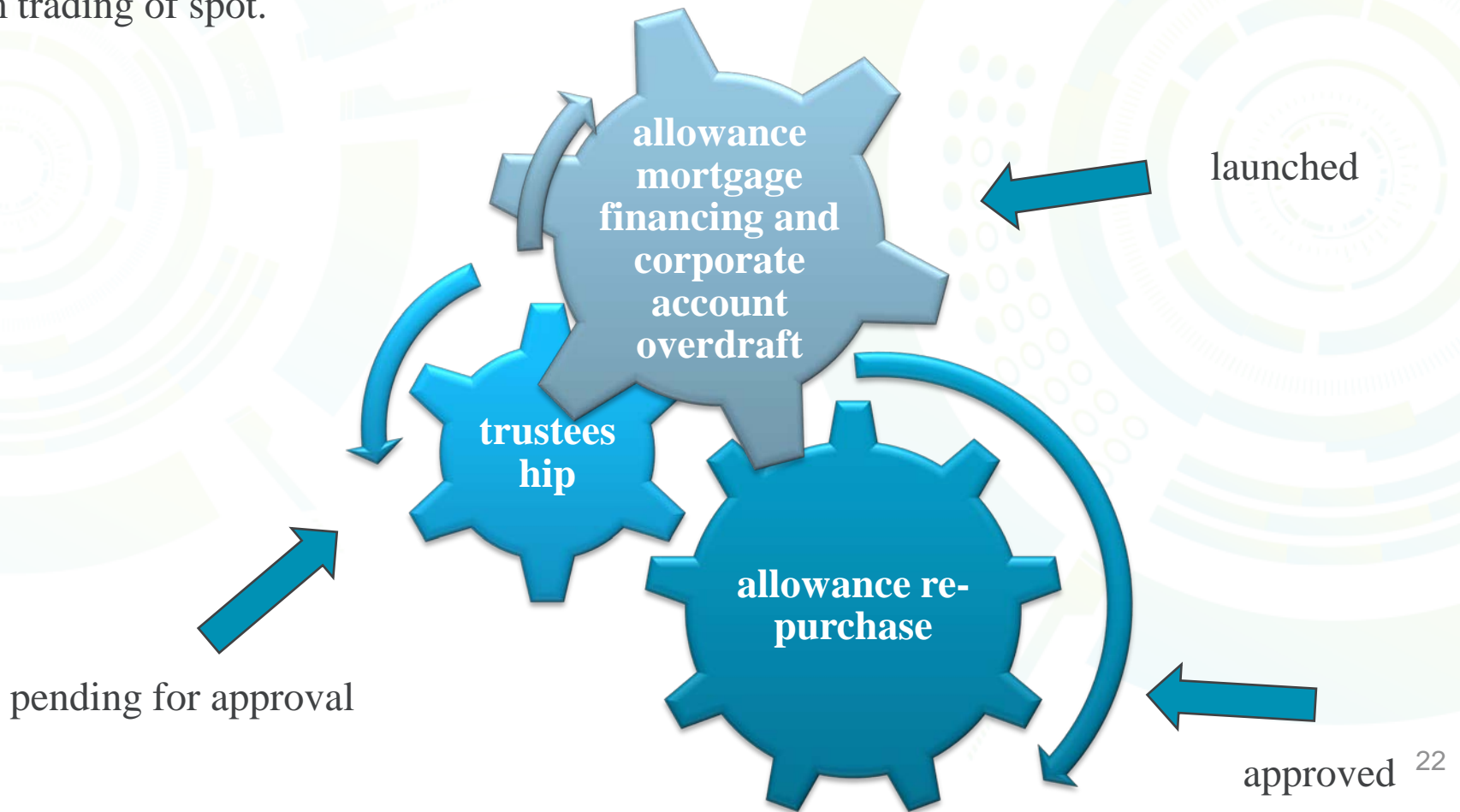
CCER is delivered online through trading platform & fund is transferred by OTC settlement

The handling fee was waived so the transaction cost was lower.

3.3 Innovative Products



CEEX issued the first carbon trading corporate account overdraft and carbon allowance mortgage financing. Meanwhile it worked on other products as well as allowance management and re-purchase of allowance. It tries to break new ground in the mid-and-long term trading of spot.



Carbon Allowance Mortgage Financing



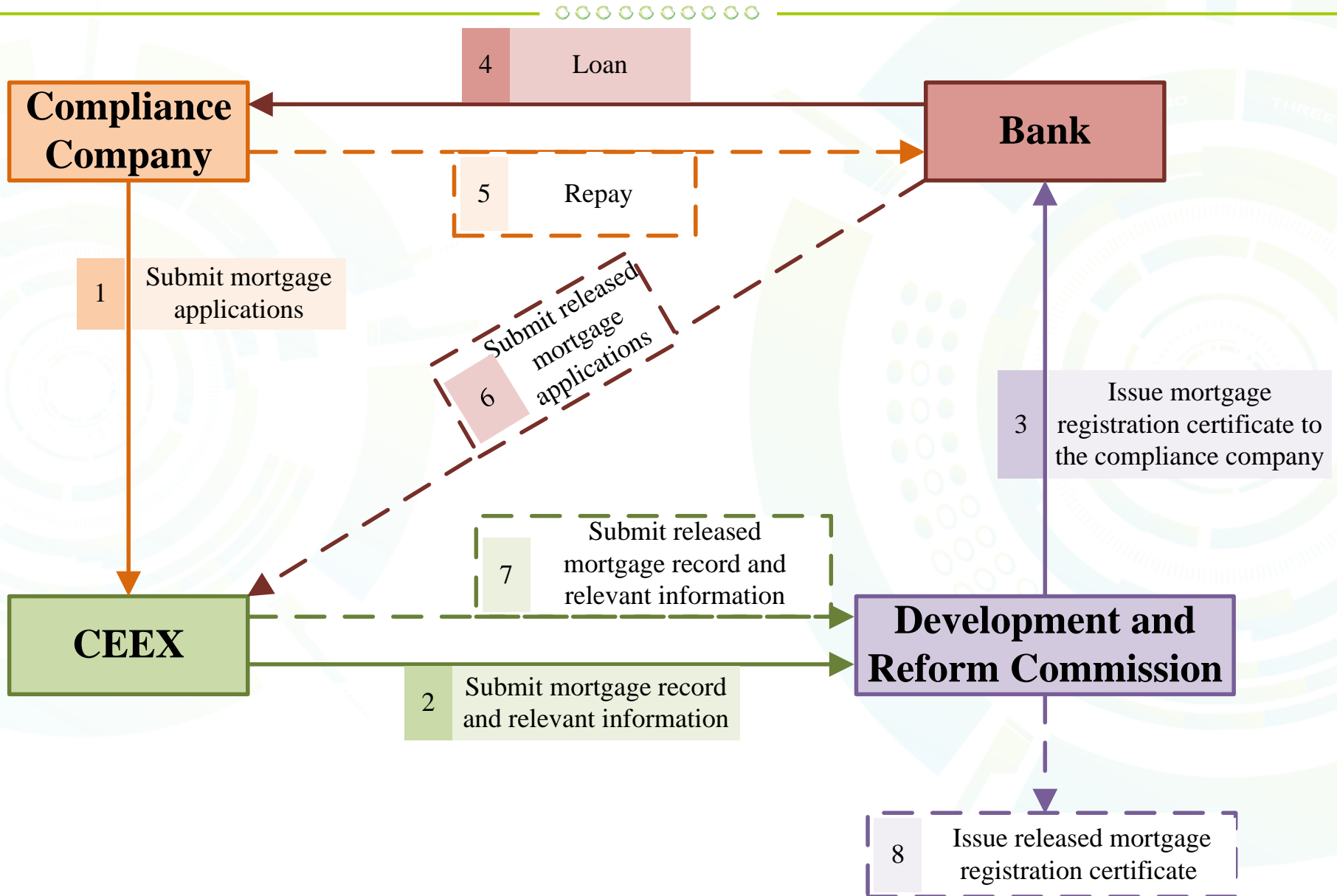
Introduction

Compliance companies or investment institutions can mortgage their carbon allowances to get funds, which can be used in carbon trading markets or invested in energy saving and emission reduction retrofits.

Features

1. Enterprises can have broader financing channels by activating their carbon assets.
2. Simple procedures of financing and repayment enable enterprises to get cash flow rapidly.
3. The companies can use the money to invest on technological innovation and energy-saving equipment improvement.

Carbon Allowance Mortgage Financing





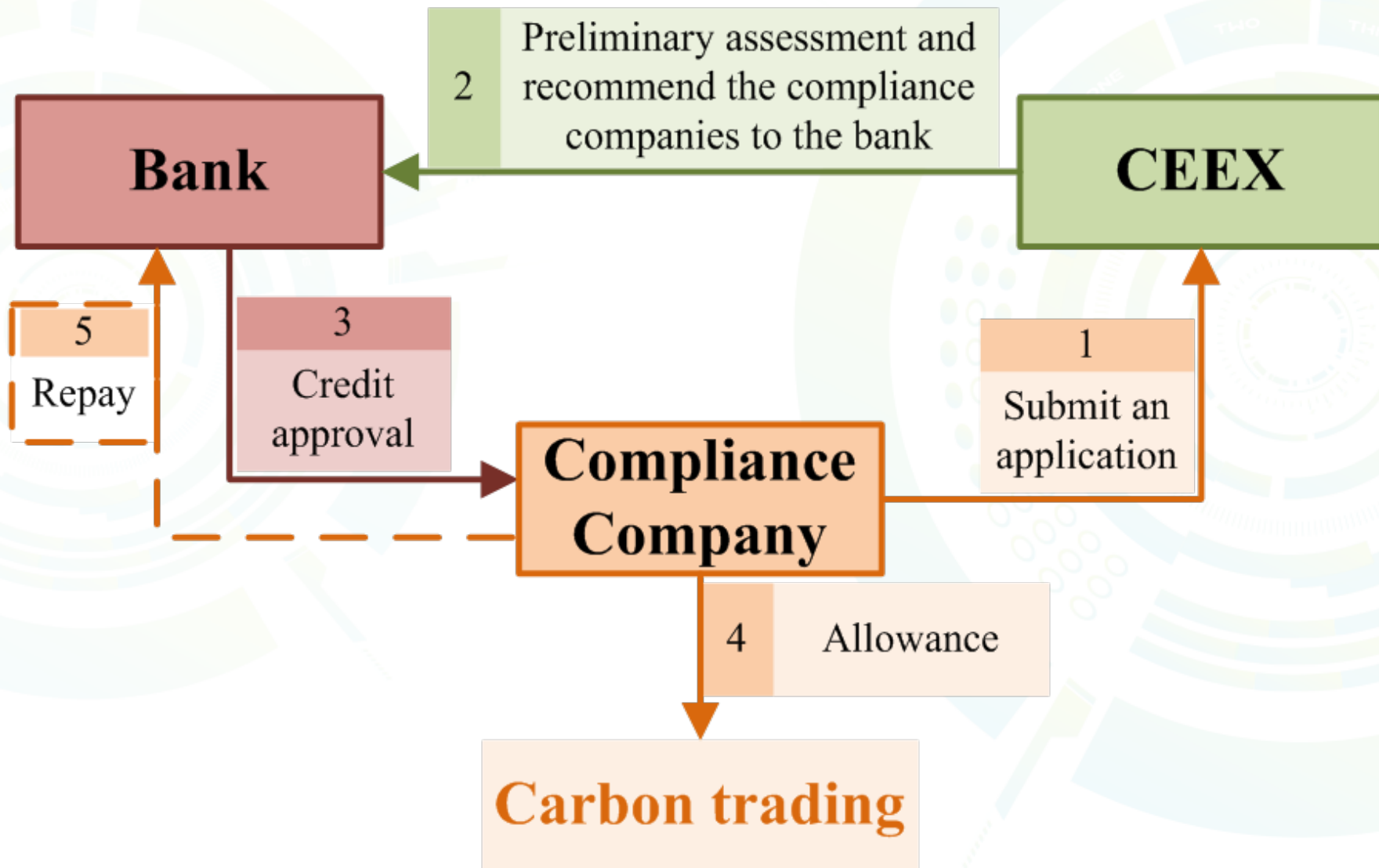
Introduction

Compliance companies granted credits by banks can gain short term financing for purchasing carbon allowances or CCER by overdrawing appointed bank accounts within a certain limit and a given period. It applies to RMB accounts only. They are the compliance companies' credit cards

Purpose

It helps the companies to finance in the short-time and expand their way of financing. It serves the economy and it is the first-of-its-kind product.

The Procedure of Carbon Trading Corporate Account Overdraft



3.5 Training



Traders

It was carried out jointly with the Education and Training Center of Ministry of Human Resources and Social Security.

11 training sessions were held and 344 people received the training.

Carbon Finance Professionals

It was carried out jointly with the Education and Training Center of Ministry of Human Resources and Social Security. It targeted professionals from banks, management companies and other carbon finance practitioners.

We cooperate with the authorities and partner with the Guangdong Low-Carbon Promotion Association. We provided free training to compliance companies together with 21 cities in Guangdong. We also hosted more than 10 seminars including EU - Guangdong Carbon Emissions Control and Trading Seminar, Carbon Trading and Practice Financial Innovation Seminar, Forestry Projects Seminar and Meet the Press. A number of business promotions were in place too to promote allowances mortgage and financing and other CCER businesses.

Group Photo of the Training



3.6 Research Topics



Aims :

We carry out research in carbon trading, provide advice to policy makers, help our province to have a bigger voice nationally and unify the national market.

Cutting-edge Research in Progress

- “Research on the Connections of Carbon Emissions Spot Market”
- “Empirical Study of the Finance and Tax Issues of Carbon Trading in Guangdong”
- “Research on Derivatives of Guangdong Carbon Finance”
- “Mechanism of Carbon Emissions Allowances Bidding”
- “The Supervision System of Guangdong Carbon Trading Market”, sponsored by SPF
- “Standards on Carbon Emissions Trading in Guangdong”

3.7 Carbon Trading GSP and the Financial Innovation

- We research on the financial innovation of carbon trading GSP and became the first city in China to propose the establishment of a carbon database.
- Under the guidance of the provincial Development and Reform Commission, we cooperate with the government departments and CEPREI in Guangzhou. We explore the pilot projects of GSP in energy-saving activities such as water, electricity and gas saving as well as green transport. The small and micro enterprises will be encouraged to participate in the GSP. We also provide support for Guangzhou to build a national centre for carbon GSP.



Low Carbon Industry



Carbon Currency



3.8 Challenges of Guangdong



Challenges	Solutions
Uncertainty of the policy	One voice with positive response
Limited and weak punishment	Increase the linkage mechanism in punishment of government, exchange and industry association in different levels
High cost in compliance for enterprises in large scale	Assist companies in completing compliance by multi-methods, increasing income and reducing the cost in trading
Concurrent operating primary and secondary market with low liquidity below the expectations	Continue increasing the degree of activity to the secondary market
Low initiatives for companies in carbon trading	Continue capabilities building and organize activities for entering and serving the enterprises



4. Suggestions for National-ETS



一级市场 Primary market

意义:

一级市场作为政府发放市场应最大限度确保参与公平度和可预期性，避免市场供需失衡，提高整体竞价效率。

Function:

The carbon allowance issuing platform aims to ensure the fair participation and predictability avoiding the supply and demand imbalance, and enhance the overall auction efficiency.

监管目标:

(1)提高价格信号(2)拍卖量、价、时间可预期(3)中小企业可公平参与(4)减少参与竞价成本(5)防止恶意抬压价格(6)利用拍卖调节市场供需

Supervisory Object:

- Improve the price discovery function
- Improve the predictability of auction related to piece, volume, and time.
- Fair participation for small and medium-size enterprises
- Prevent the vicious price manipulation
- Adjust the demand and supply of market with the auction mechanism.

监管任务:

- 筛选交易平台、管理交易参与人、监督竞价过程（可引入第三方）、对交易结算进行管理
- 交易前公布交易安排、交易后公布成交信息等
- 掌握市场供需信息，通过适当方式调节市场流通量

Supervisory Task

- Select a trading platform, manage participators, supervise the whole auction process and regulate the clearing and settlement of trading
- Announce a trading plan before the auction, and disclose the transaction results at the end auction.
- Grasp the market information referring to supply and demand, and adjust the market turnover by the appropriate way.

二级市场（包括场外市场）

Secondary Market (including OTC market)

意义：

在碳交易运行之初就设定完整的交易监管体系，将交易监管工作和机制设计进行有机的结合

Function

Establish a sound trading supervisory system at the beginning of carbon trading, and combine the trading supervision and mechanism design.

监管目标：

- 维护市场公平
- 促进市场繁荣
- 保障平等参与
- 稳定交易价格
- 惩罚交易违规
- 降低监管成本

Supervision Objective

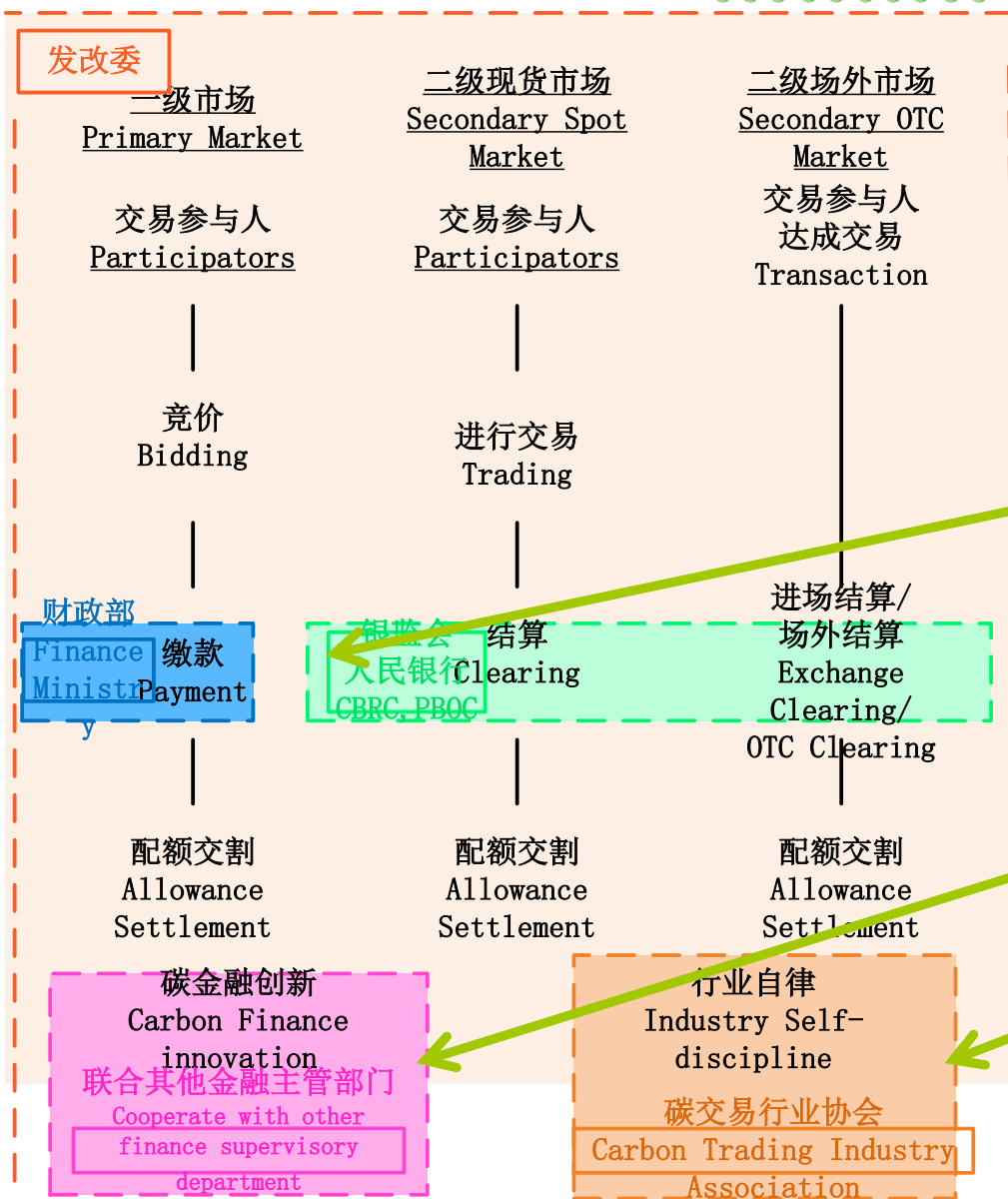
- Maintain market fairness
- Promote market prosperity
- Guarantee fair participation
- Stabilize trading price
- Punish illegal behavior of trading
- Reduce supervisory cost

监管任务：

- 管理交易参与者及平台资质，为市场进入设定门槛
- 监督交易过程，防止交易过程出现违规行为
- 保障市场信息对称，提高市场透明度
- 针对交易违规行为进行适当处置

Supervisory Task

- Regulate trading participators and trading platform qualification ,and set threshold for market entrance
- Supervise trading process and prevent illegal behavior of trading
- Guarantee the information symmetry and enhance market transparency
- Punish the illegal behavior of trading



初步建议(Highlights)

(1) 碳交易实行期货现货分开监管

Separate regulation on spot and futures

(2) 制定一级市场管理办法
Formulate administration rule for primary market

(3) 日常监管以主管部门和交易平台为主

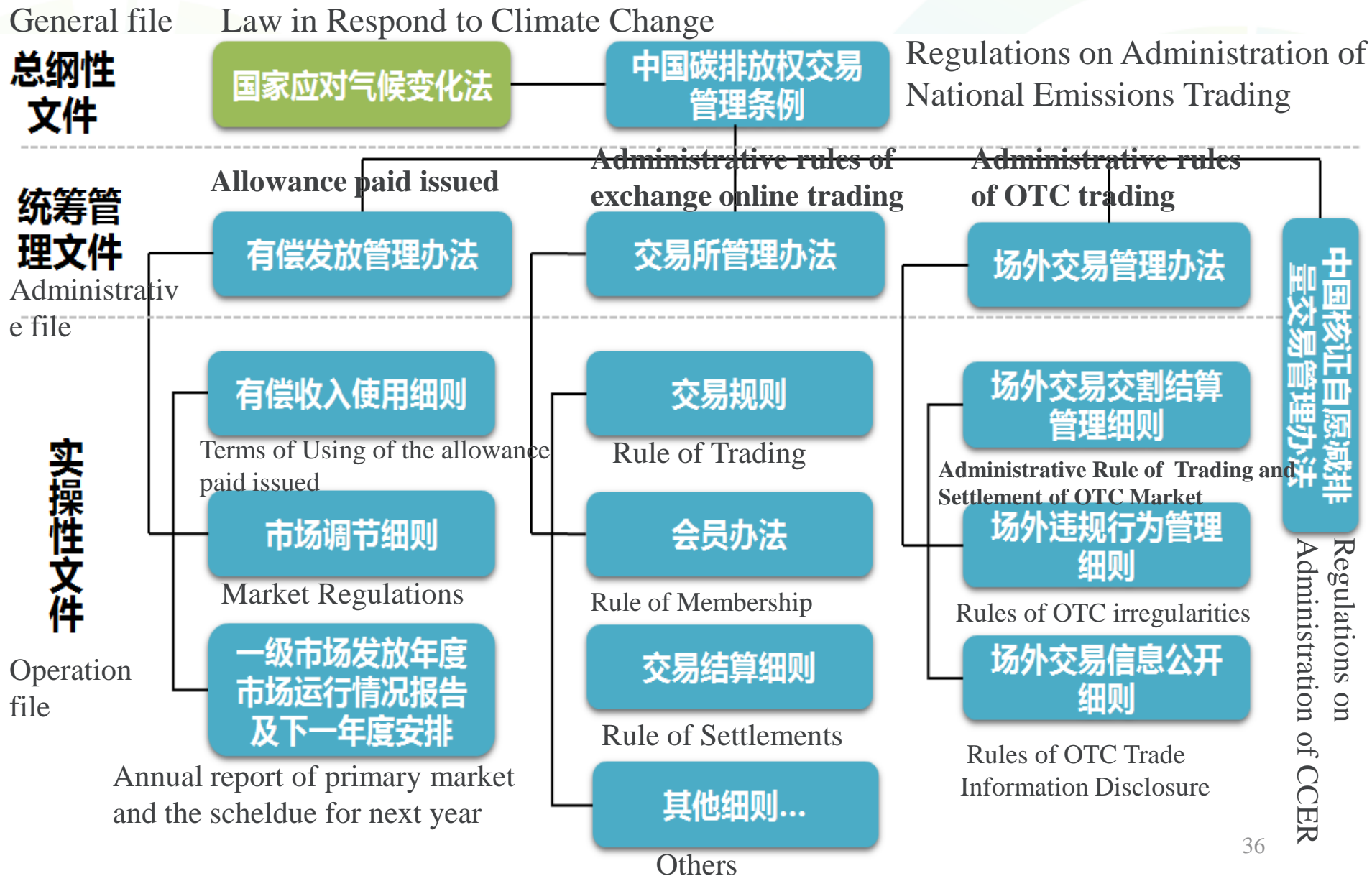
Competent authorities and trading platform take charge in daily regulation

(4) 创新模式灵活处理

Flexible handling and innovative modes

(5) 行业协会自律监督

Self-discipline supervision by association of industry



交易环节	监管主体	监管职责
账户开立	发改委	制定市场准入标准，对开设登记簿账户进行二级审核
	交易所	开户的初步审核，交易参与人背景和资质确认
	人民银行及银监会	规定外资进入标准，审核外资账户开立、管理外汇额度，并对银行-碳交易所结算账户体系进行监管
	行业协会	对企业交易参与人的交易信用进行备案，提供交易的信任名单及重点监控名单

交易环节		监管主体	监管职责
交易	发改委		对日、周、月、年的交易情况进行跟踪，对违反交易规则的行为进行处罚，管理交易参与人的持仓量，对市场价格剧烈波动进行干预
	交易所		监督每日交易，向主管部门汇报交易情况，对代理交易者的交易行为进行监督，对出现内部交易或操纵市场行为及时汇报主管部门
交割结算	发改委		管理登记簿的交割系统，对交割异常行为进行监控
	交易所		完成碳和资金的划转，出现结算问题或交易参与者违法问题及时停止结算
	银行		监控交易的三方存管或银行托管账户，对出现挪用资金、违规交易的情况进行管理

交易环节	监管主体	监管职责
交易安全与信息披露	发改委	管理登记簿的序列号不被随意泄露，区分交易账户和持有账户，并对进入登记簿的权限进行分级管理；按规定公布排放数据和履约信息保障交易参与的公平性
	交易所	利用最高安全级别的交易系统和结算系统，对交易账户的登陆进行严格的安全管理；每日按规定披露交易数据，不对交易数据做任何的隐瞒和篡改。
金融创新	发改委	作为碳金融产品的主要审批部门，会同其他主管部门进行协商
财税处理	财政部	制定相关会计准则
	国税总局	制定交易税收标准，执行税收监督
	交易所	代为征收交易环节税费

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Thank You!

Welcome to Join
the Carbon Trading
in Guangdong!



China Emissions Exchange