



China's carbon market —progress and outlook

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Outline

1. Policy background

2. Seven ETS pilots

3. National ETS outlook

1. Policy background

China's Twelfth Five-Year Plan

Chapter 21: Actively cope with global climate change

- gradually establish carbon emissions trading

国家发展和改革委员会文件

发改办气候[2011]20801号

国家发展改革委办公厅 关于开展碳排放权交易试点工作的通知

北京市、天津市、上海市、重庆市、广东省、湖北省、深圳市发展改革委：
根据党中央、国务院关于应对气候变化的总体要求，为落实“十二五”规划关于逐步建立国内碳排放交易市场的要求，推动运用市场机制以较低成本实现2020年全国控制温室气体排放行动目标，加快经济发展方式转变和产业结构升级，经综合考虑并结合有关地区申报情况和基础，我委同意北京市、天津市、上海市、重庆市、湖北省、广东省及深圳市开展碳排放权交易试点。

请各试点地区高度重视碳排放权交易试点工作，切实加强组织领导，建立专门工作队伍，安排试点工作专项资金，抓紧组织编制碳排放权交易试点实施方案，明确总体思路、工作目标、主要任务、保障措施及进度安排，报我委审核后实施。同时，各试点地区要着手研究制定碳排放权交易试点管理办法，明确试点的基本规则，并报我委备案。要抓紧确定本地区温室气体排放总量控制目标，研究制定温室气体排放指标分配方案，建立本地区碳排放权交易监管体系和登记注册系统，培育和建设交易平台，做好碳排放权交易试点支撑体系建设，保障试点工作的顺利进行。

特此通知。

国家发展改革委办公厅
二〇一一年十月二十九日

主题词：气候变化 碳排放 试点 通知

NDRC published Interim Measures on Voluntary GHG emission reduction trading

国家发展和改革委员会文件

发改办气候[2012]1668号

国家发展改革委关于印发 《温室气体自愿减排交易管理暂行办法》的通知

国务院各部委、直属机构，各省、自治区、直辖市发展改革委：

为实现我国2020年单位国内生产总值二氧化碳碳排放下降目标，《国民经济和社会发展第十二个五年规划纲要》提出逐步建立碳排放交易市场，发挥市场机制在推动经济发展方式转变和产业结构调整方面的重要作用。目前，国内已经开展了一些基于项目的自愿减排交易活动，对于培育碳减排市场意识、探索和试验碳排放交易程序和规范具有积极意义。为保障自愿减排交易活动有序开展，调动全社会自觉参与碳减排活动的积极性，为逐步建立总量控制下的碳排放权交易市场积累经验，奠定技术和规则基础，我委组织制定了《温室气体自愿减排交易管理暂行办法》（以下简称《暂行办法》）。现印发施行。

— 1 —

中共中央关于全面深化改革若干重大问题的决定

2015 Government

Report: expand ETS Pilots

Opinions on ecological civilization

Establish national emissions trading market

Kyoto Protocol

2005

China issued Measures for Operation and Management of Clean Development Mechanism Projects in China

2011

NDRC approved 7 carbon emission trading pilots

2012

2013

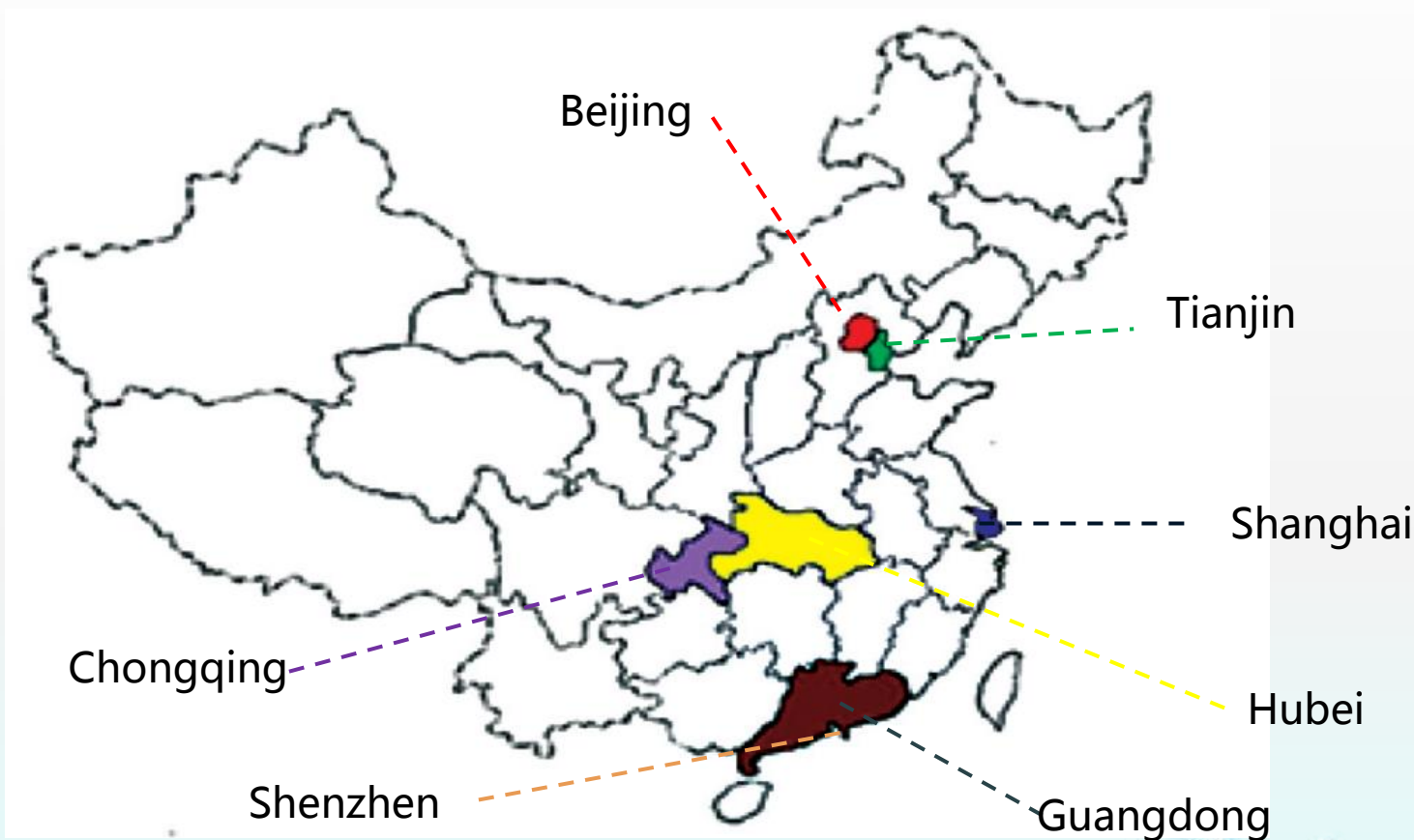
ETS pilots implementation
The decision of Third Plenary Session of 18th CPC Central Committee

2015

launch national ETS

2020

2、 China's Seven ETS pilots



The seven pilots cover population of 260 million, energy consumption of 830 million tce, and GDP of 14 trillion Yuan RMB, accounting for **19%**, **27%** and **23%** of the country's total respectively (**2012**)

ETS pilots implementation plan

Local legislation, MPC decision

Local government regulation

Cap and coverage

- Top-down and bottom-up method to decide the cap
- Decide sectors, threshold and gases

Allocation

- Grandfathering, benchmarking and game methods
- Free allocation and auction, most free
- Annual or one-time allocation
- Adjustment

MRV

- MRV guidelines
- Third party verification institution management measures
- Emission data electronic reporting

Compliance

- Cycle
- Registry
- Offset mechanism
- Punishment

Trading

- Participants;
- Products;
- Rules;
- Forms: exchange-traded and OTC
- Pricing and bidding

Capacity Building

- Management institution and staff
- Training
- Carbon emission trading services

Legislation

Beijing	<ul style="list-style-type: none">- Municipal People's Congress Decision (Dec, 2013)- Management measures (May, 2014)
Tianjin	<ul style="list-style-type: none">- Management measures (Dec, 2013)
Shanghai	<ul style="list-style-type: none">- Management measures (Nov, 2013)
Hubei	<ul style="list-style-type: none">- Management measures (Apr, 2014)
Guangdong	<ul style="list-style-type: none">- Management measures (Jan, 2014)
Shenzhen	<ul style="list-style-type: none">- Municipal People's Congress Provision (Oct, 2012)- Management measures (Mar, 2014)
Chongqing	<ul style="list-style-type: none">- Management measures (May, 2014)- Municipal People's Congress Decision draft (Apr, 2014)

Cap and coverage

	Cap	Sectors and companies	Threshold
Beijing	About 55 MtCO ₂	Power, heating, cement, petrochemical, other industries, and services,	10000 tCO ₂ (2009-2012)
Tianjin	About 160 MtCO ₂	Iron & steel, chemical, power and heating, petrochemical, oil & gas drilling	20000 tCO ₂ (from 2009)
Shanghai	About 150 MtCO ₂	Iron & steel, petrochemical, chemical, power and heating, non-ferrous, building materials, aviation, airport, ports, railways, hotels, commercial and retails, and finance	Industry sectors: 20000 tons CO ₂ (2010-2011), non-industry sectors: 10000 tCO ₂ (2010-2011)
Guangdong	About 388 MtCO ₂	Power, cement, iron & steel, petrochemical	20000 tCO ₂ (2011-2012)
Shenzhen	About 30 MtCO ₂	26 sub-sectors (manufacturing industries) Public and commercial buildings	Industry sectors: 3000 tCO ₂ , public building and government offices building: 10000m ²
Hubei	324 MtCO ₂	Power, iron & steel, cement, chemical, petrochemical, cars and equipment manufacturing, non-ferrous	60000 tce (2010-2011)
Chongqing	130 MtCO ₂ e	Power, metallurgy, chemical industry and other industries	20000 tCO ₂ (2008-2012)

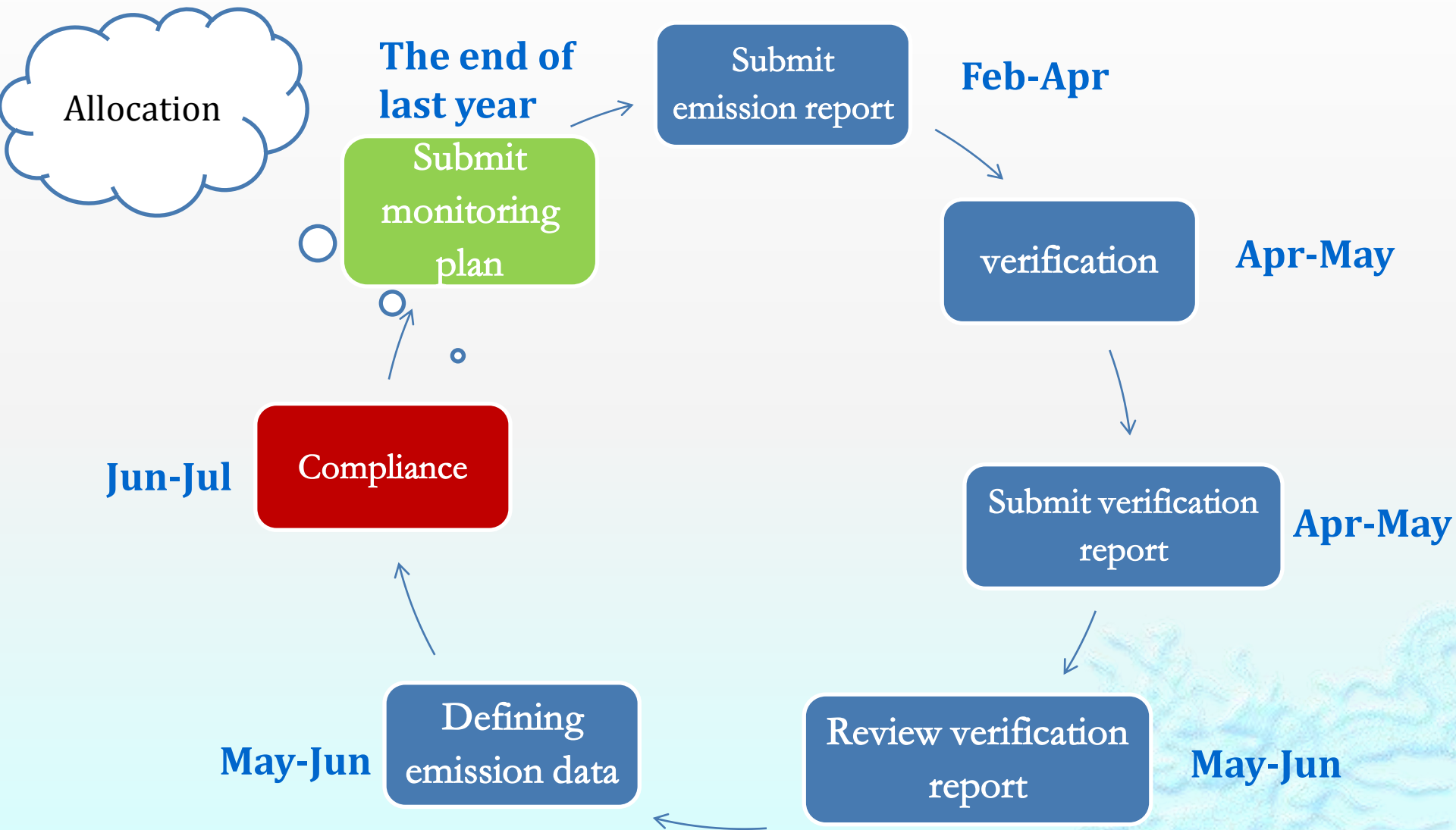
Allocation

	Free	Auction	Issue
Beijing	- grandfathering - benchmarking	-	Annual
Tianjin	- grandfathering - benchmarking	-	Annual
Shanghai	- grandfathering - benchmarking	- 7220 tons (June 30, 2014)	Once for three years
Guangdong	- grandfathering - benchmarking	-3%, 11.12 million tons (2013) - 5% in power sector, 3% in other sectors (2014) -8 million tons(2014)	Annual
Shenzhen	- manufacturing sector: competitive gaming - building sector: benchmarking	- 75 thousand tons (June 6, 2014)	Annual
Hubei	- grandfathering - benchmarking	- 30% allowance for auction - auctioned 2 million tons on Mar 31, 2014	Annual
Chongqing	- combination of cap-trade and competitive gaming	-	Annual

MRV

	Standard and guideline	Verification body	Electronic reporting
Beijing	- 6 sectors emission accounting and reporting guidelines - verification guideline, verification institution management measures, expert review	19	√
Tianjin	- 5 sectors emission accounting guidelines - 1 emission reporting guideline	4	Paper
Shanghai	- General guideline +9 sectors emission accounting and reporting guidelines - verification institution management measures	10	√
Guangdong	- General guideline +4 sectors emission accounting and reporting guidelines	16	√
Shenzhen	- MRV guidelines - especial requirements for building emission accounting and reporting	21	√
Hubei	- General guideline +11sectors emission accounting and reporting guidelines - verification guideline - verification institution management measures	3	√
Chongqing	- MR guidelines - MRV detailed regulation - verification guideline	11	√

Compliance



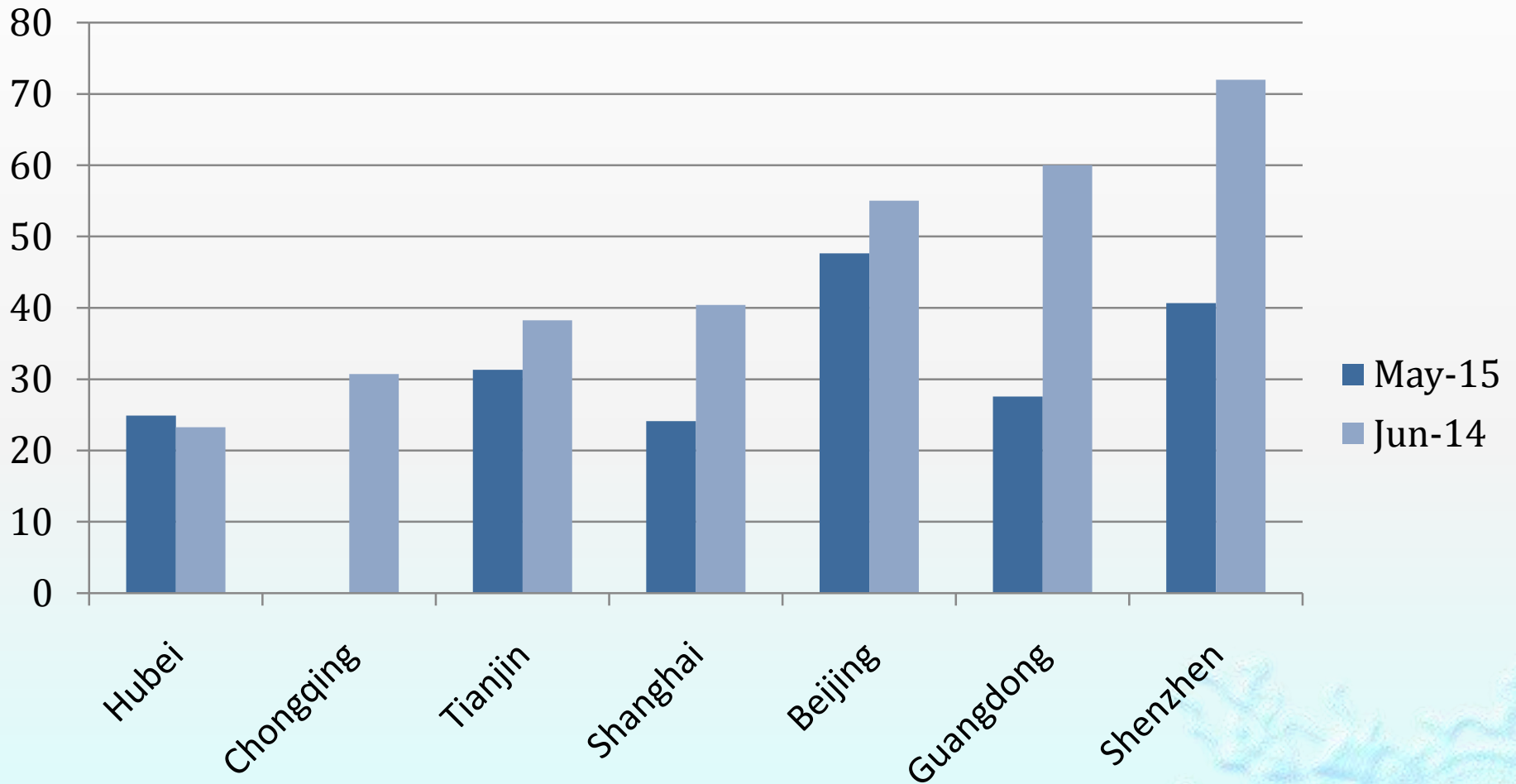
Compliance

	Reporting	Verification	Compliance	Compliance status
Beijing	Feb 28	Mar 20	Jun 15	97.1% (2014); 100%(2015)
Tianjin	Apr 30	Apr 30	May 31	96.5%(2014); 99.1%(2015)
Shanghai	Mar 31	Apr 30	Jun 1-30	100%(2014); 100%(2015)
Guangdong	Mar 15	Apr 30	Jun 20	99%(2014); 100%(2015)
Shenzhen	Mar 31	Apr 30	Jun 30	99.4%(2014); 99.6%(2015)
Hubei	Last work day of Feb	Last work day of Apr	Last work day of Jun	100%(2015)
Chongqing	Feb 20	-	Jun 20	2015

Market rules

	Participants	Approach	Products
Beijing	- ETS covered enterprises -Other enterprises , institutions and individuals	- open trading on exchange - OTC	BEA, CCER、energy savings, carbon sink
Tianjin	- ETS covered enterprises - national and international institutions, enterprises, organizations and individuals	open and agreement trading on exchange	TJEA, CCER
Shanghai	- ETS covered enterprises	open and agreement trading on exchange	SHEA, CCER
Guangdong	- ETS covered enterprises -Other enterprises , institutions and individuals	open and agreement trading on exchange	GDEA, CCER
Shenzhen	- ETS covered enterprises -Other enterprises , institutions and individuals	open and agreement trading on exchange	SZA, CCER
Hubei	- ETS covered enterprises -Other enterprises , institutions and individuals	open and agreement trading on exchange	HBEA, CCER
Chongqing	- ETS covered enterprises -Other enterprises , institutions and individuals	open and agreement trading on exchange	CQEA-1, CCER

Carbon price



Unit: Yuan/ton
from launching date to May 31, 2015

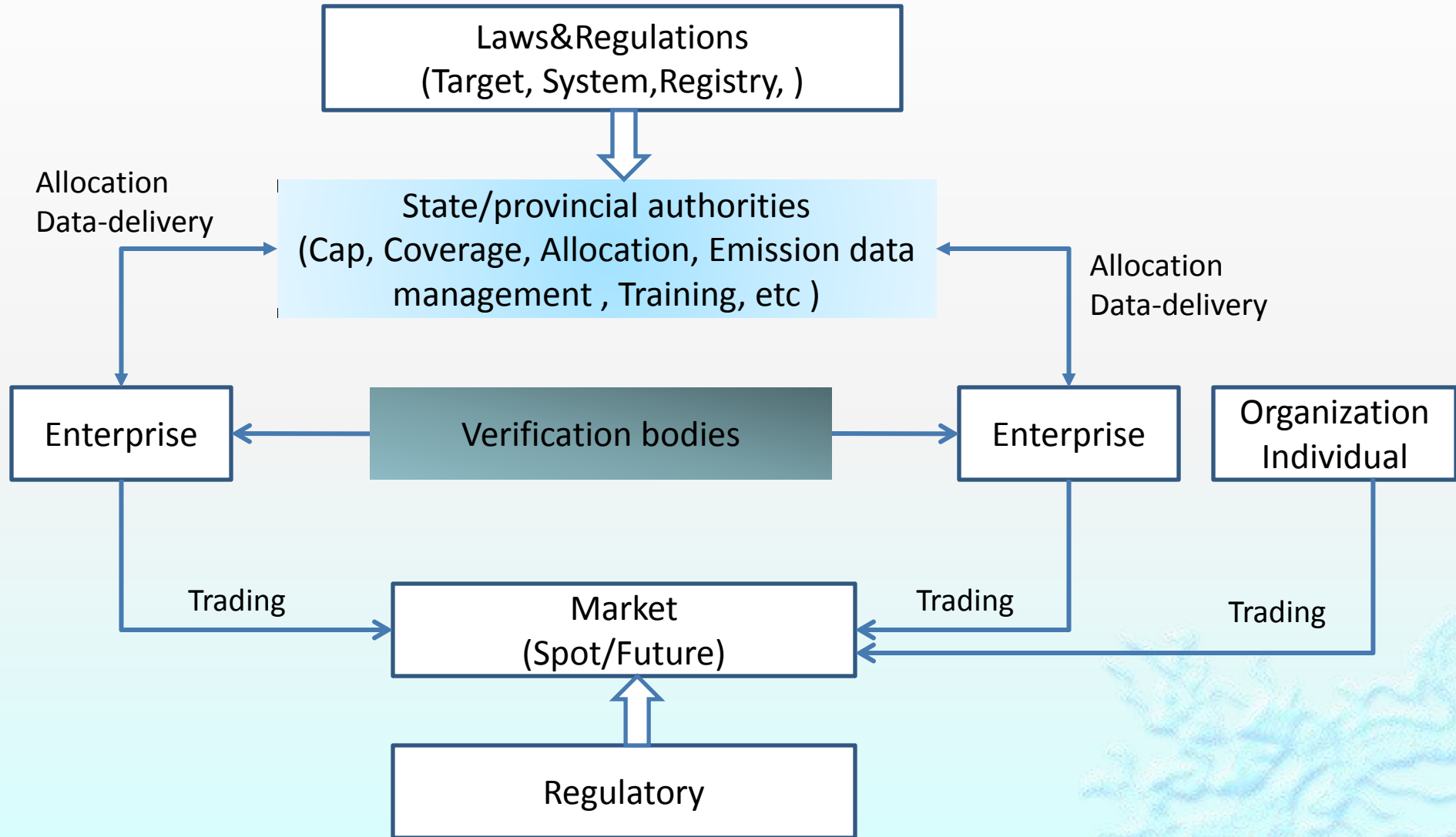
Conclusions

- ◆ Binding cap-trade policy and implementation system, transform carbon intensity target to absolute target, covering major emission sectors and enterprises
- ◆ ETS play an important role in reaching local carbon intensity target and controlling GHG emissions in pilot regions
- ◆ Local characteristics on policy and legislation, technical standards and market operation
- ◆ Technical foundation and capacity improved
- ◆ Strict compliance and punishment rules
- ◆ Carbon markets shaping, carbon prices discovered
- ◆ Enterprise capacity and awareness elevated

Issues

- ◆ Disparities among 7 ETS pilots
- ◆ Low legal force of local policy
- ◆ Lack of basic data, scientific methodology and capacity
- ◆ Different MRV, registry and trading system standards
- ◆ Lack of policy and information transparency
- ◆ Lack of supervision on market and service sector
- ◆ Resistance from enterprises

3. National ETS Outlook



Planning

Research and construction of National ETS

Operation and improvement

Fully implementation

2014

2015-2016

2017-2020

After 2020

Central

- Prepare Regulation
- MRV Guidelines
- Infrastructure

- publish Regulation
- Report and verification of historical data

- First Stage
- ETS under "Five Unify" Principle

- Second Stage
- Expansive coverage
- Perfect regulation
- Research international connection

Local

- Ability building
- Liability list
- Allocation under unified method

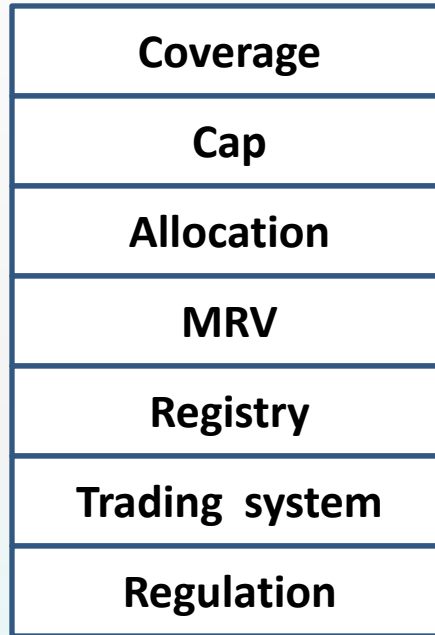
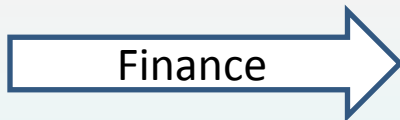
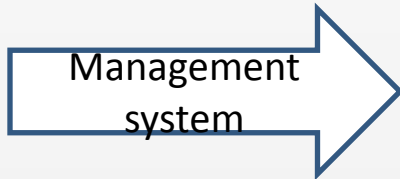
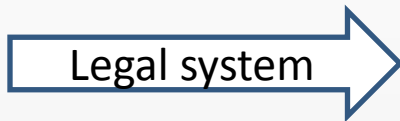
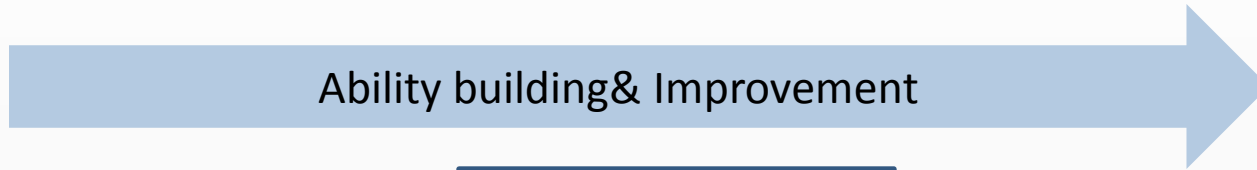
- Allocate allowance annually
- Organize MRV affairs annually
- Participant in perfecting ETS system according to characteristics

Enterprise

- Participant in ability building activities
- Establish inside emission report system
- Cooperate in MRV affairs

- Perfect carbon assets management system
- Cut emission-reduction cost by trading voluntarily
- Participant in perfecting ETS system

Pathway



Status & Completed job



THANK YOU!