

Carbon Markets: From Current Practices to Their Role in the New Climate Regime

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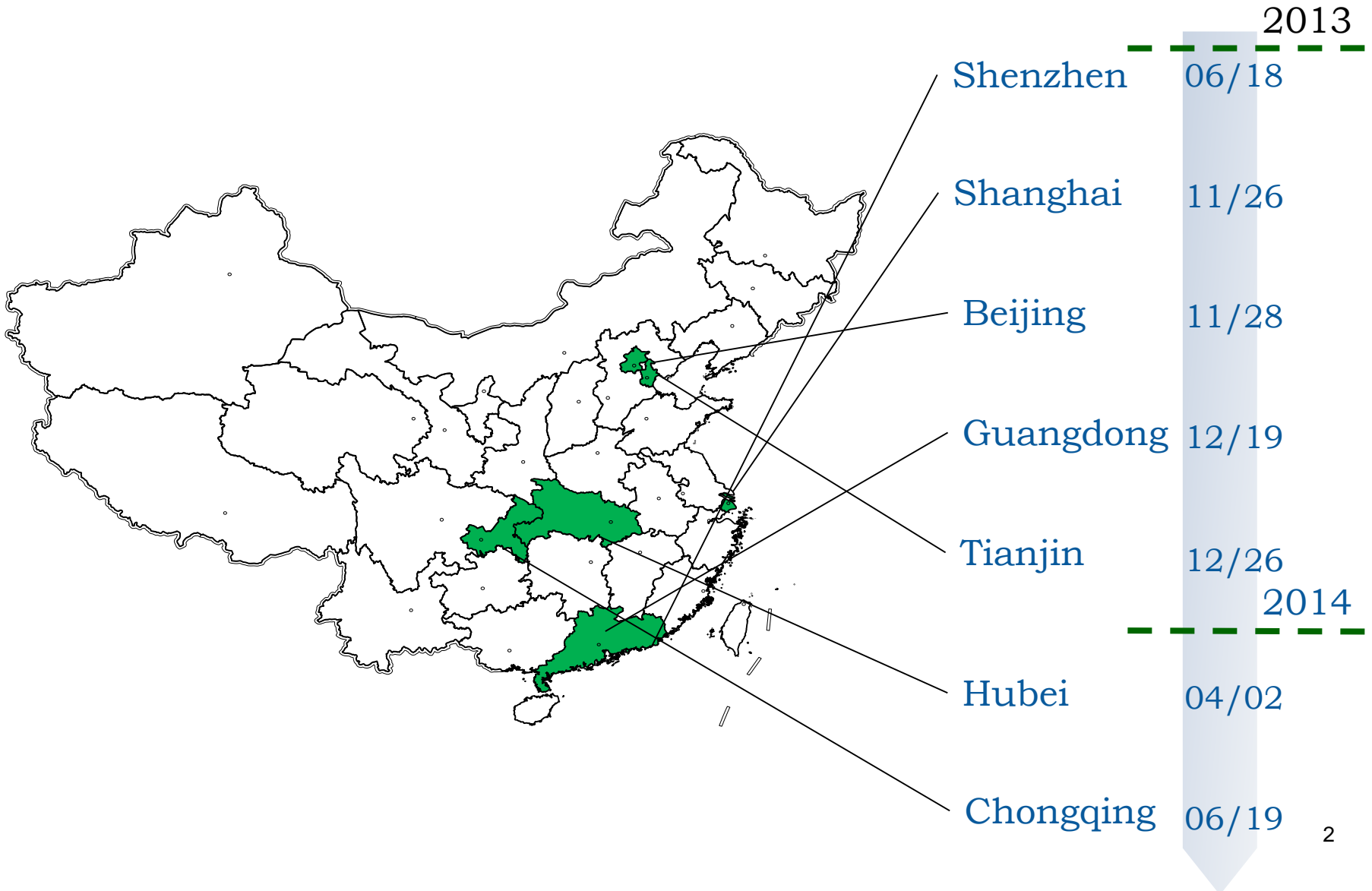
# China's Carbon Emissions Trading Pilots - An Initial Review

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# 1. Basic Facts



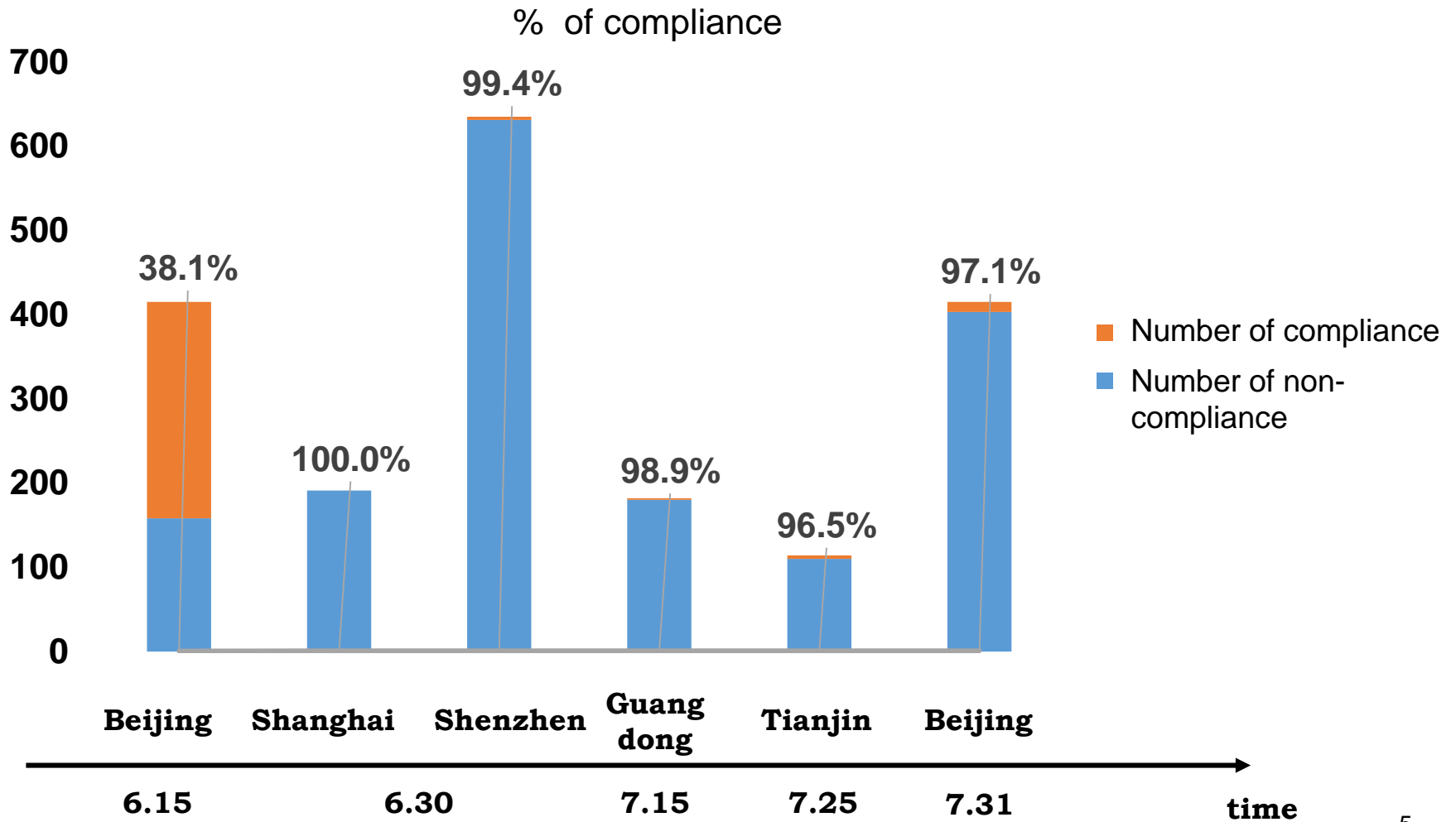
# 1. Basic Facts

	Coverage Threshold	Number of Covered Enter.	Reporting Threshold
Beijing	10,000 tCO <sub>2</sub>	~490	2,000 tce
Tianjin	20,000 tCO <sub>2</sub>	114	-
Shanghai	Industrial: 20,000 tCO <sub>2</sub> Non-Industrial: 10,000 tCO <sub>2</sub>	197	10,000 tCO <sub>2</sub>
Chongqing	20,000 tCO <sub>2</sub>	242	-
Hubei	60,000 tce (~150,000 tCO <sub>2</sub> )	138	-
Guangdong	20,000t CO <sub>2</sub>	202	10,000 tCO <sub>2</sub> or 5,000 tce
Shenzhen	5,000t CO <sub>2</sub>	635	3,000 tCO <sub>2</sub>

# 1. Basic Facts

		Beijing	Tianjin	Shanghai	Hubei	Guangdong	Shenzhen
Covered Sectors	Electricity and Heat	√	√	√	√	√	√
	Iron and Steel		√	√	√	√	√
	Non-metal Processing Industry (cement, ceramics, etc.)	√		√	√	√	
	Chemical Industry		√	√	√		√
	Petrochemical Industry	√	√			√	
	Oil and Gas Exploration		√				
	Non-ferrous Metals			√	√		
	Textile and Paper			√	√		√
	Air Transport			√			
	Transport Stations			√			
	Service Industry (mainly buildings)	√		√			√
	Other Sectors	√				√	√ <sub>4</sub>

# 1. Basic Facts



## 2. Some Features of the Pilots

### 1) Flexible Emissions Cap

- Announced caps vs. actual caps
- Top-down vs. Bottom-up approaches
- Ex-post adjustment of freely allocated amount
- Flexible auctioned amount

## 2. Some Features of the Pilots

### 2) Divergent Free Allocation Approaches

- Grandfathering
  - ✓ Emission-based
  - ✓ Intensity-based
- Benchmarking
  - ✓ Historical Production-Based
  - ✓ Current Production-Based
  - ✓ Designed Production-Based
- Current emissions-based updating
- Ex-post adjustment

## 2. Some Features of the Pilots

### 3) Direct vs. indirect emissions

- Heavy regulation of the electricity and heat generation sectors
- Electricity Import

### 4) Building and transportation sector covered

- Significant part of the emissions
- Transaction costs and compliance pressure

### 5) Emissions Verification Arrangement

- Contractual relationship
- Sustainability



## 2. Some Features of the Pilots

### 6) Diversified Offset Mechanisms

- Types of credits
- Limit of utilization
- Technology, location, time period

### 7) Market Intervention Mechanisms

- Price floor and price ceiling
- Auctioning and buy-back

### 8) Legal Basis

### 9) Diversified Compliance Rules

- Fines, crediting system, eligibility for preferential policies, etc.

## 2. Some Features of the Pilots

### 10) Evolving Rules

- Coverage and scope
- Free allocation approaches
- Auctioning
- MRV
- ...

### 11) Divergent Performances

- Trading volume
- Cap setting, allocation approaches, compliance mechanisms

### 3. Observations

- 1) Comprehensive, diversified and successful piloting
- 2) Data challenge: availability and quality
- 3) Human and financial resource challenges
- 4) Coordination of different types of policies
- 5) Adaptation to the (changing) big context
- 6) Cooperation from other authorities
- 7) Invaluable for China's unified national system development, especially the pathway selection

# Thanks

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