



The development of the carbon market in China

Nadia Zhang

301131152

Introduction and Background

- Rapid Economic Growth \longrightarrow Population Growth
- Pollutions (GHG) \longrightarrow Global Warming



Frederic J. Brown/AFP/Getty Images



Kadir van Lohuizen for The New York Times (Greenland's ice melting)

Introduction and Background

- Kyoto Protocol
- Established a trading system for greenhouse gas emissions worldwide
- China, which produces one-fourth of the world's carbon-dioxide pollution, signed the Kyoto Protocol on 29th May, 1998



What is the Carbon Market?

- How does it work?



• Overall of the Carbon Market

- **Primary carbon market**

 - Companies & Government

- **Secondary market**

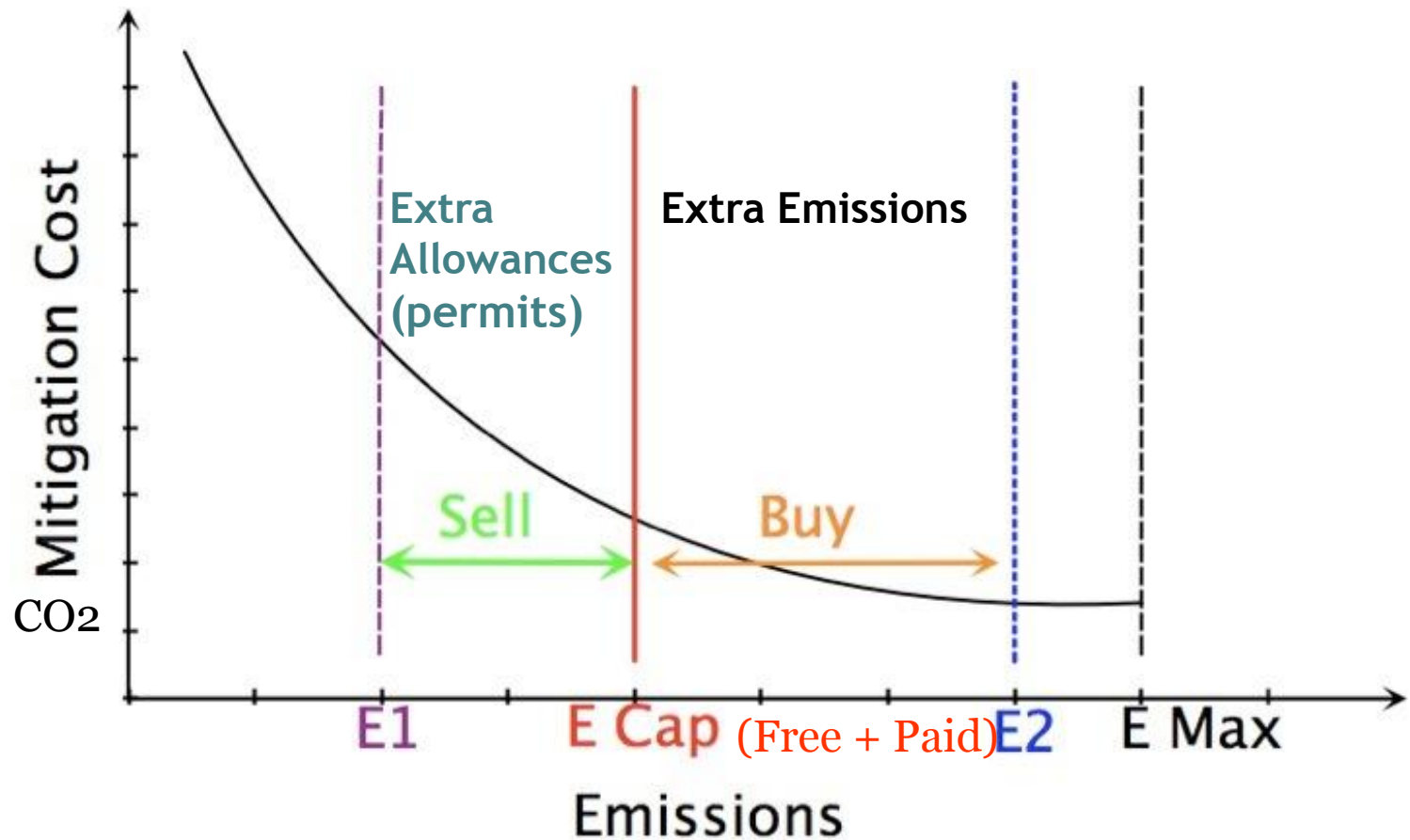
 - Companies & other market participants

• Overall of the Carbon Market

- Liquidity
 - Trade domestically and internationally
- Regional
 - No globally unified carbon market
- Fast growing market
 - Total volume of project-based transactions and allowances is US\$ 63 billion in 2007, and total value transacted US\$ 126 billion in 2008 (Doubled)

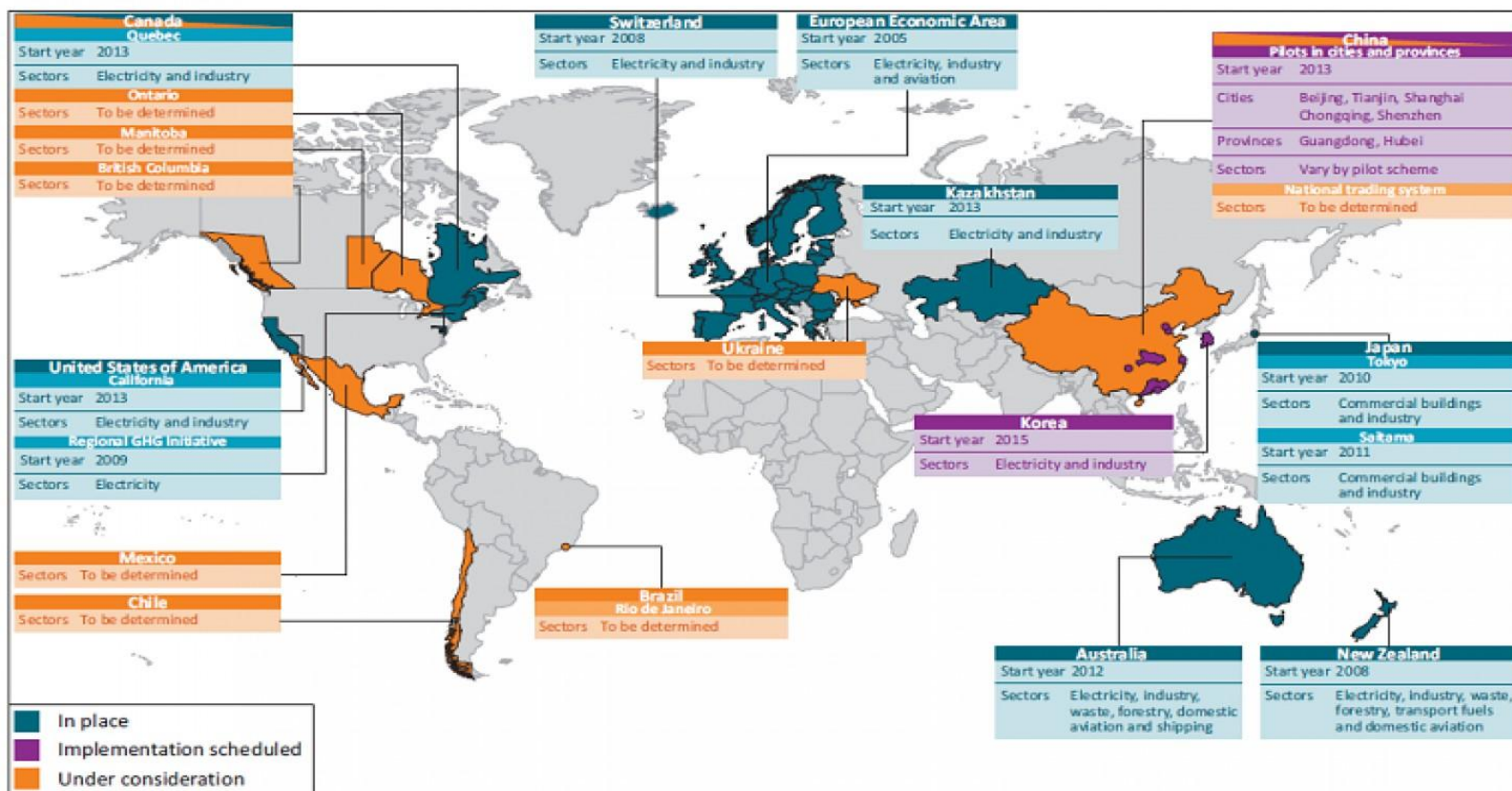
Statistics from the World Bank

•Economic point of view-Cap and trade



• Overview of the Carbon market

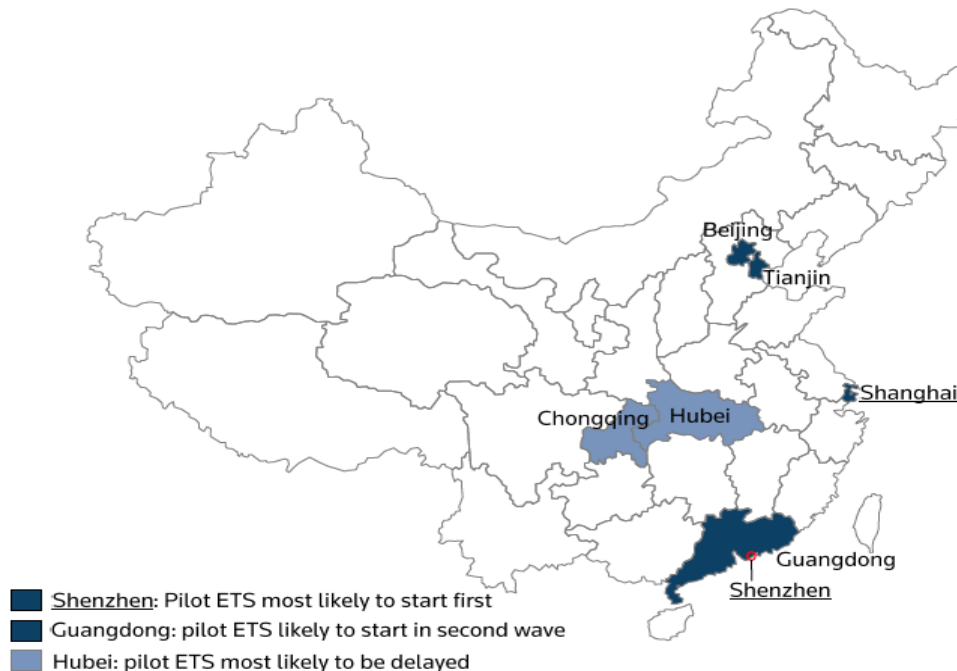
Figure 1.6 ▶ Current and proposed emissions trading schemes



This map is without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries, and to the name of any territory, city or area.

Case study - Carbon Market in China

- Chinese government approved seven pilot emission trading schemes in October 2011.



Five Cities: Shenzhen, Beijing, Tianjin, Shanghai and Chongqing

Two Provinces: Guangdong and Hubei

Carbon Market in China

Emission Trading Scheme	Lunching Time
Shenzhen	18 th June, 2013
Shanghai	26 th November, 2013
Beijing	28 th November, 2013
Guangdong(Province)	19 th December, 2013
Tianjin	26 th December, 2013
Hubei(Province)	2 nd April, 2014
Chongqing	TBD (near future)

- China is still at the infancy stage

Carbon Market in China




- Chinese government wants to cut the carbon intensity by 40%-45% per GDP CO₂ emit by 2020 compared to 2005 levels.
- Shenzhen ETS
 - Covered 635 industrial companies, which emitted 31.7 million tons of carbon dioxide in 2010
 - 200 public buildings
 - Total trading volume of CO₂ : 200,000 ton, with accumulated trading amount of \$6.5 million until March, 2014

Carbon Market in China

- How to set the cap?(Shenzhen ETS)
 - An electronic system, which automatically give the carbon emitting quota(cap)
 - Shenzhen Notary public Office is participating during whole process
 - Since the market is still in the beginning stage, most of the quota is free



Carbon Market in China

- Carbon Price (on average on 2nd April)
 - 79.97 Yuan/ton(\$12.898)  Shenzhen CEEEX(China Emission Exchange) Total 1929 ton Carbon emissions traded
 - 57 Yuan/ton(\$9.177)  Beijing CBEEEX Total 700 ton Carbon emissions traded
- Carbon Price in Australia during 2013/14(fixed) 
24.15 Australian dollar(\$22.29)

pros

- Efficiency (Ex: companies reduce emission by using clearer way to produce)
- Government revenue(Ex: Auction for the allowances)
- Use the economic way to solve the environmental problem



pros

- More CDM projects(Clean Development Mechanism)
 - Under the protocol Mechanism
 - Project-based market
 - Win-win for both sides
 - There are 1385 approved CDM projects in China(ex: wind power station)

Cons

- Encourages coal and oil industries use more than before due to the cheap carbon permits
- Carbon offsets encourage companies to cheat
- Chinese Market structure and Trading system remain to be perfected



Solutions

- I. Human Resources
- II. Encourage more companies to join the market
- III. Establish related policies and laws for the carbon market

Barriers

- I. Lack of Sufficient Human Resources
- II. Companies are lack of awareness of emission market
- III. Lack of Legal Policy Support System

Recommendations

- I. Training Plan for Key Personnel
- II. Increase Publicity and Education to Promote Energy-Saving Emission Reduction
- III. To Perfect the Legal System and Strengthen Market Supervision

The End

Thank you!

