China’s ETS Developments

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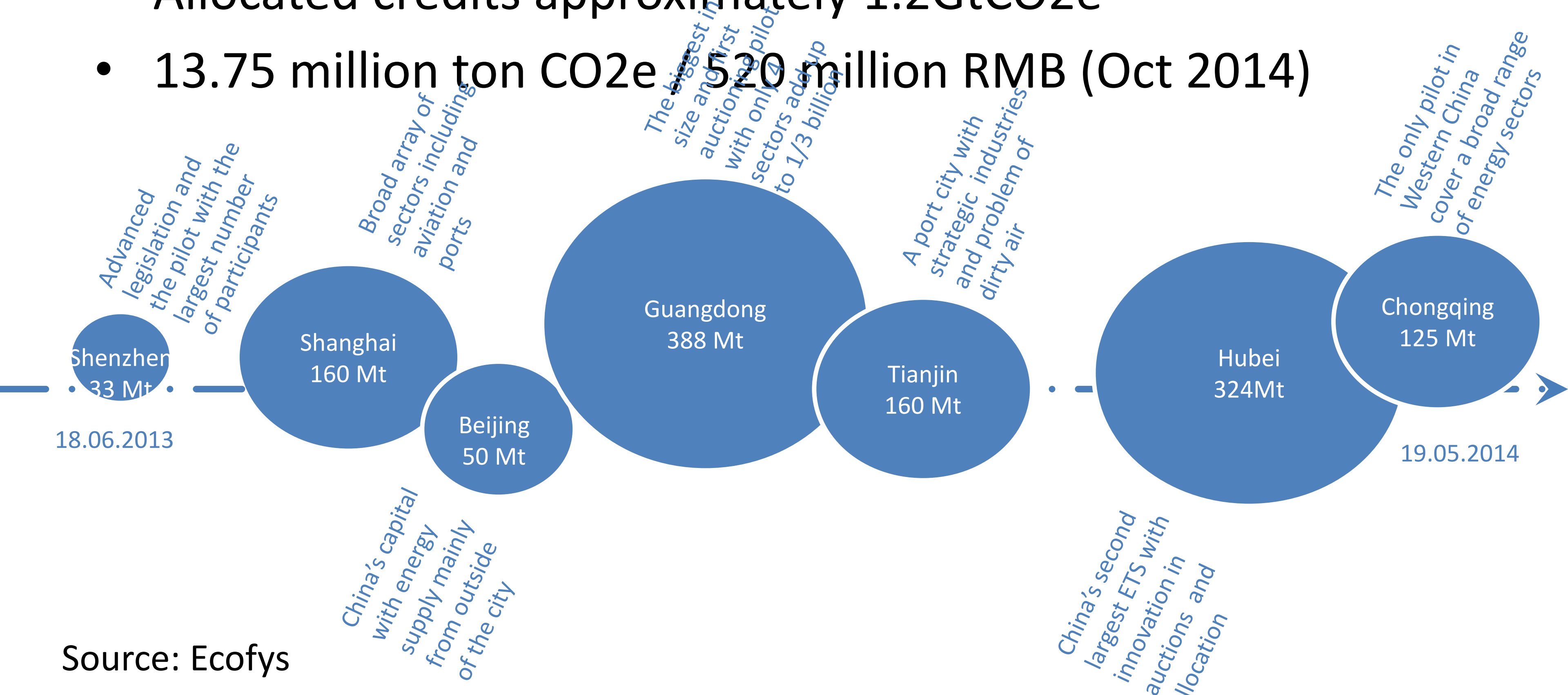
Agenda

- Basic Facts
- Why ETS?
- Challenges
- Next Step(s)
- Linking

The dry stuff

- 40% of China’s emission and 9% of global emission
- Close to 1200 entities covered
- Allocated credits approximately 1.2GtCO2e
- 13.75 million ton CO2e / 520 million RMB (Oct 2014)



Source: Ecofys

Push and pull factors

- Urgent need to mitigate

- Carrot & Stick
- Capacity-builder & local involvement
- Global leadership

When the rubber hits the road…

- Deliver what it meant to do – emission reduction
- Pass through the cost
- Data, data, data!
- Capacity

A great leap to the "national market"?

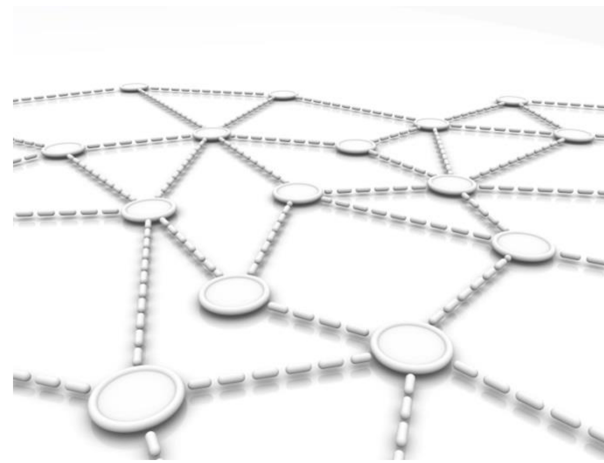
- *Careful with the term "national market"
- An expanded system is very certain
- Key steps ahead
  - Legal instrument from State Council (end 2015?)
  - Cap setting + allocation (early to mid 2016)
  - MRV system
  - Infrastructure (exchange(s), registry)

A great leap to the "national market"?

- A hybrid system with strong top down elements (as outlined by "Provisional Measures for the Administration of Carbon Emission Rights Trading, December 2014")
- Likely determined from the top
  - Sectors
  - Cap setting
  - Registry and exchange(s)
  - The principles of allocation (more bottom up)

Connecting the dots?

- 2nd Phase might in itself be a linking exercise



- Int'l linking a very long shot
- Compatibility challenges
- Environmental safeguards

- Certain level of interest ("National Climate Change Plan (2014-2020)", P38 - Study linking with international carbon market)
- Not to be over-interpreted
- Rule shaper vs. rule taker

Thank You

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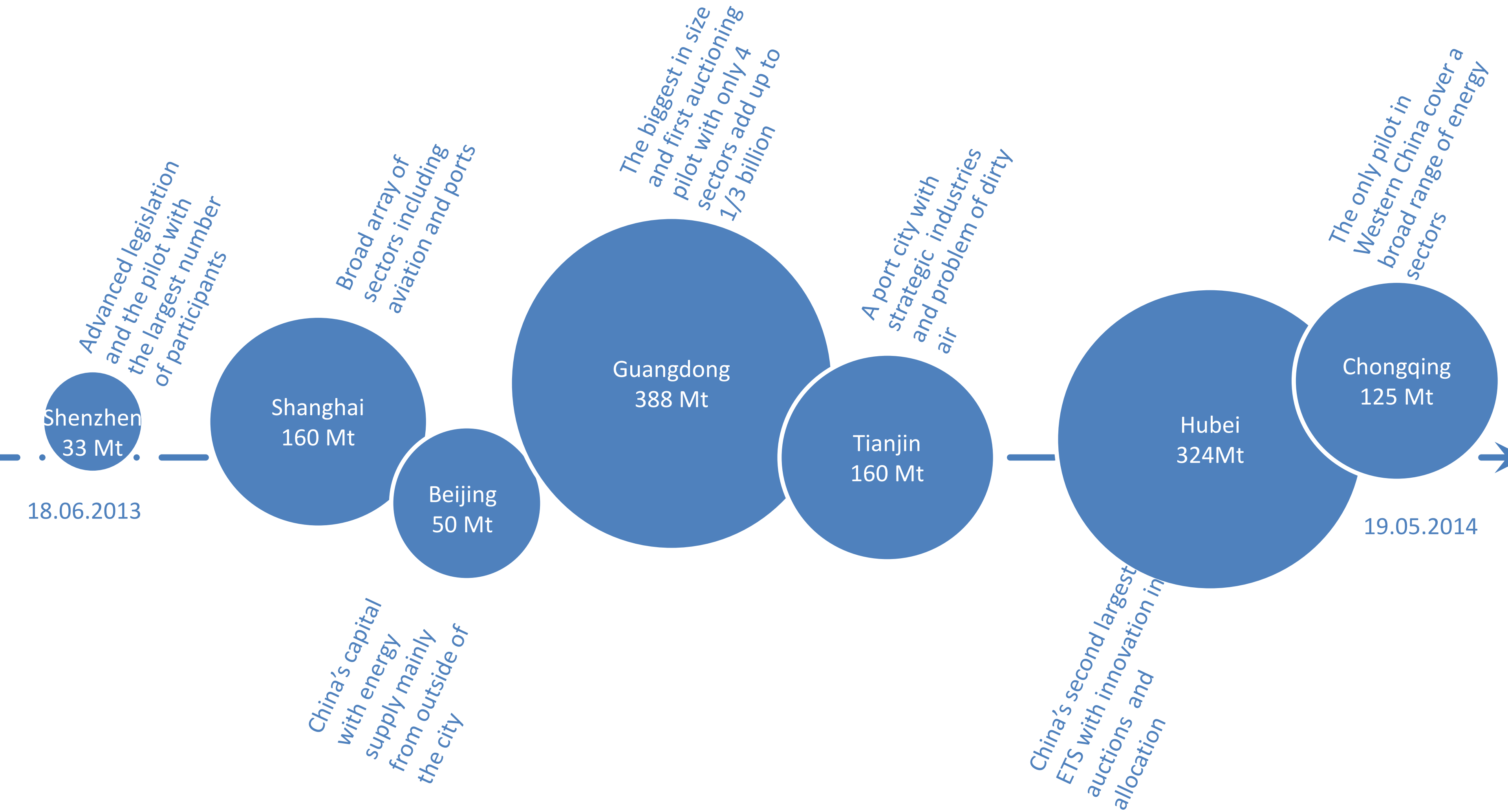
Back-up Slides

	Guangdong	Shanghai	Tianjin	Beijing	Shenzhen	Hubei	Chongqing
Allowances	2013 (388Mt)	2013 (160Mt), 2014, 2015	2013 (160Mt), 2014*, 2015*	2013 (50Mt)	2013 (33Mt)*, 2014*, 2015*	2014 (324Mt)	2013 (125Mt)
Grandfathering							
Baseline years	2010-2012	2009-2011	2009-2012	2009-2012	N/A	2009-2011	2008-2012
sector	Power and heat cogeneration, mining in cement, petrochemical, iron and steel scrap processing	Industrial, manufacturing and public buildings	Power and heat, iron and steel, chemical, petrochemical, oil and gas	Power and heat, cement, chemical, other industrial and service sectors	N/A	Power, iron and steel, chemical, petrochemical, car making, non-ferrous metals, glass, paper and other industrial sectors	Power and heat, iron and steel, chemical, petrochemical, coal mine, glass, paper and other industrial sectors
calculation	*historical emissions x reduction factor*	*historical emissions + early actions credits*	*<u>Power</u>: historical emissions per production x production <u>Others</u>: historical emissions x efficiency factor x reduction factor*	*<u>Power</u>: historical emissions per production x production x reduction factor <u>Other</u>: historical emissions x reduction factor*	N/A	*historical emissions x reduction factor*	*the highest historical year emissions x reduction factor*
Benchmarking							
sector	Power, cement and long process steel	Power sector, aviation, airports and ports	New entrants and expanded capacity	New entrants and expanded capacity	Power, water, buildings and industrial sectors	Power and heat	N/A
calculation	*benchmark x historical production x control factor*	*benchmark x production*	*benchmark x production*	*benchmark x production*	*benchmark x production***	*benchmark x exceeded production + (historical emissions x reduction factor) x 50%*	N/A
adjust to actual production	no	yes	Yes	yes	yes	yes	yes
Auctioning	3% in 2013, 2014; 10% in 2015	no	no	no	>3% from 2014	30% in 2014	no
New entrants	benchmarking or expected energy consumption	expected capacity and loading rate	benchmarking	benchmarking	benchmarking	N/A	N/A



Source: Ecofys


Beijing 北京
Tianjin 天津
Shanghai 上海
Chongqing 重庆
Hubei 湖北
Guangdong 广东
Shenzhen 深圳

Source: IETA

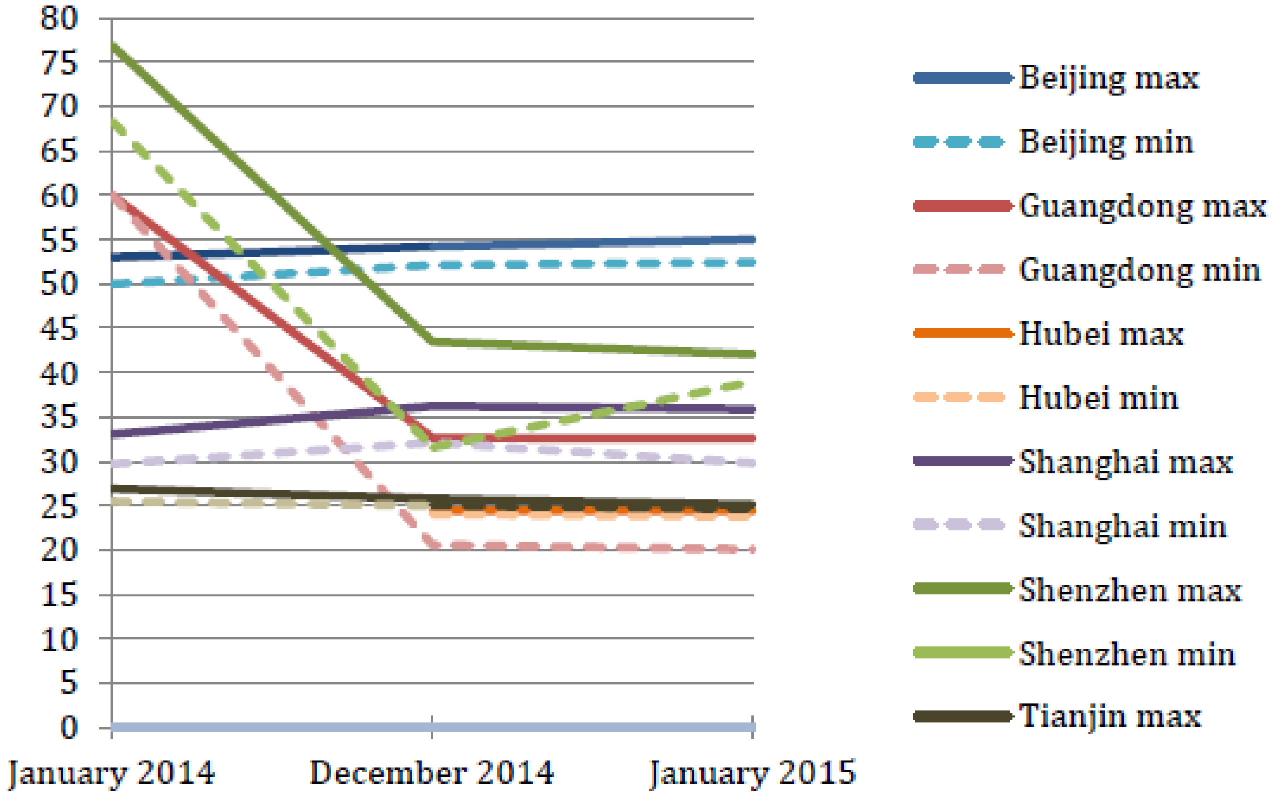


Figure 2 – Carbon price trends in each ETS pilots[30]

Source: *China carbon*, [*http://chinacarbon.net.cn/wp-content/uploads/2015/02/China-Carbon-Market-Review_January-2015.pdf*](http://chinacarbon.net.cn/wp-content/uploads/2015/02/China-Carbon-Market-Review_January-2015.pdf), *January 2015*

Source: IETA

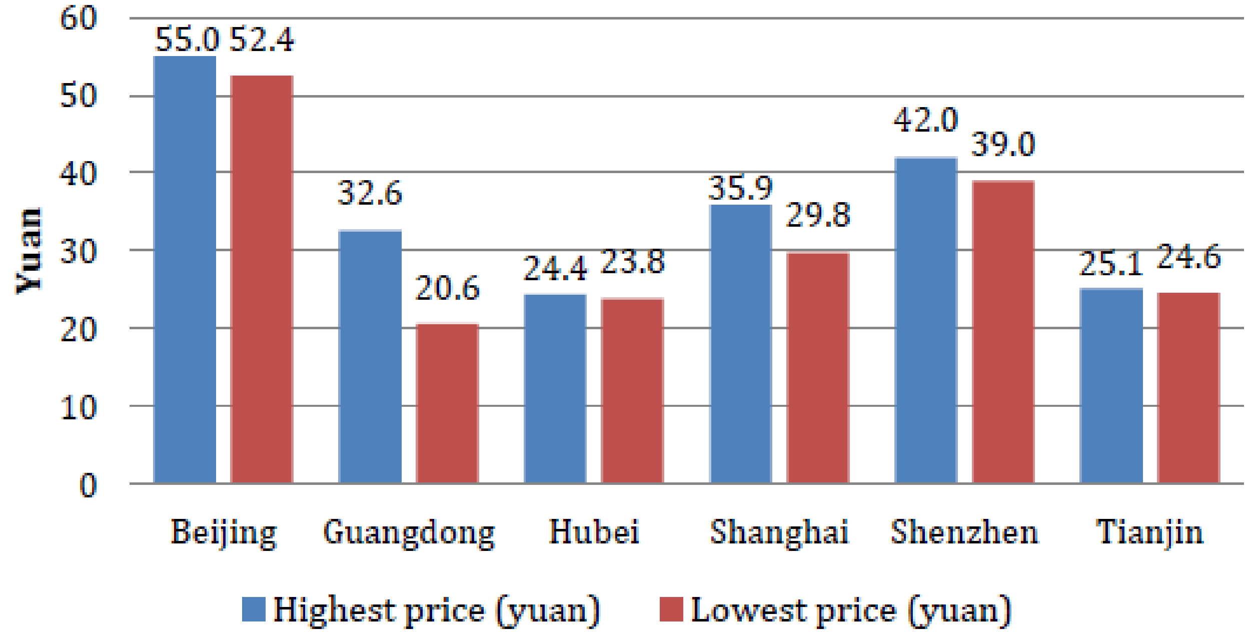


Figure 3 – Carbon price for each ETS pilot in January 2015

Source: *China carbon*, *http://chinacarbon.net.cn/wp-content/uploads/2015/02/China-Carbon-Market-Review_January-2015.pdf*, *January 2015*

Source: IETA