

Australia-China research program on climate change mitigation policy

Workshop/public forum at ANU, 12 Feb 2014

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Australian National University

Australia-China research program on climate change mitigation policy

Partners/collaborators

- Tsinghua U
- Fudan U
- Wuhan U
- Beijing Inst Tech
- China Carbon Forum
- ANU
- UNSW
- U Melbourne

- ✓ Follows Australia-China Climate Change Forums in previous years
- ✓ co-ordinated at ANU Crawford School
- ✓ Forum in Beijing later in 2014
- ✓ Papers will be released at ccep.anu.edu.au

Australia-China research program on climate change mitigation policy

Research topics

- ETS pilot schemes
 - Reasons for the design
 - Initial evaluation
 - Prospective analysis of future changes
 - Towards national carbon pricing?
- Energy sector reform
 - Role of market reform in facilitating lower emissions outcomes
 - Demand; short term supply; long term supply choices
 - Electricity sector investment
 - Energy demand trends
- Motivations/co-benefits; economic reform

This afternoon

The emissions trading pilot schemes

- Shaozhou Qi, Wuhan University
Hubei's ETS, and design features of ETS in the Chinese context
- Qing Tong, Tsinghua University
Beijing's ETS
- Hao Zhang, Melbourne University
Shenzhen's ETS

(Tea break)

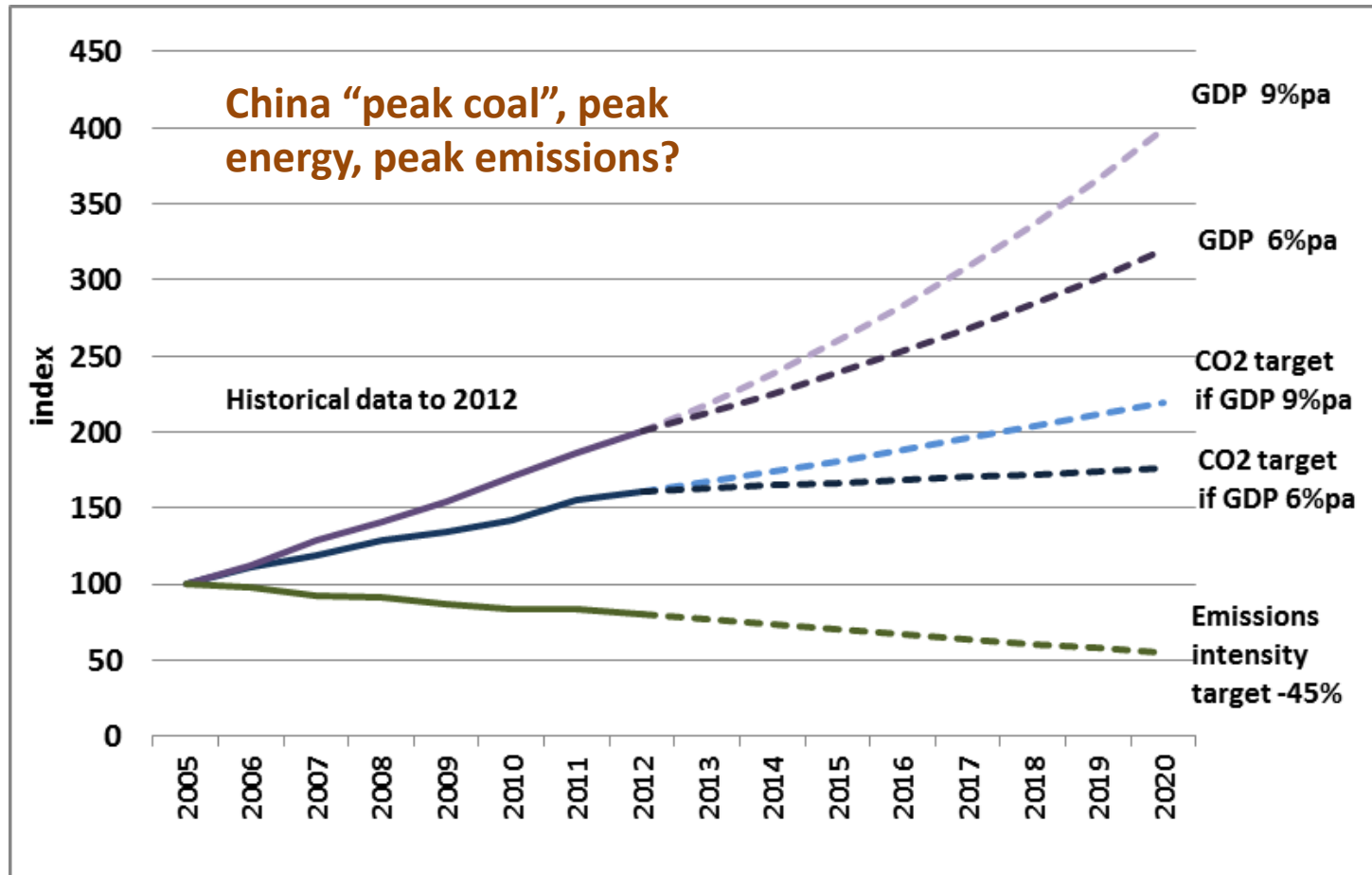
Energy sector reform

- Yu Wang, Tsinghua University
How Policies Narrow the Gap between Renewable Energy Actual Development and Targets in China
- Xinyang Wei / Maria Balatbat, UNSW
Modelling the effect of emissions pricing on electricity sector investments
- Paul Burke, ANU
Price elasticity of China's coal demand

China's ambition to cut carbon emissions

What does China's emissions intensity target imply for absolute emissions?

Illustrative trajectories for GDP and emissions to meet a 45% reduction in emissions intensity from 2005 to 2020



China's climate policy

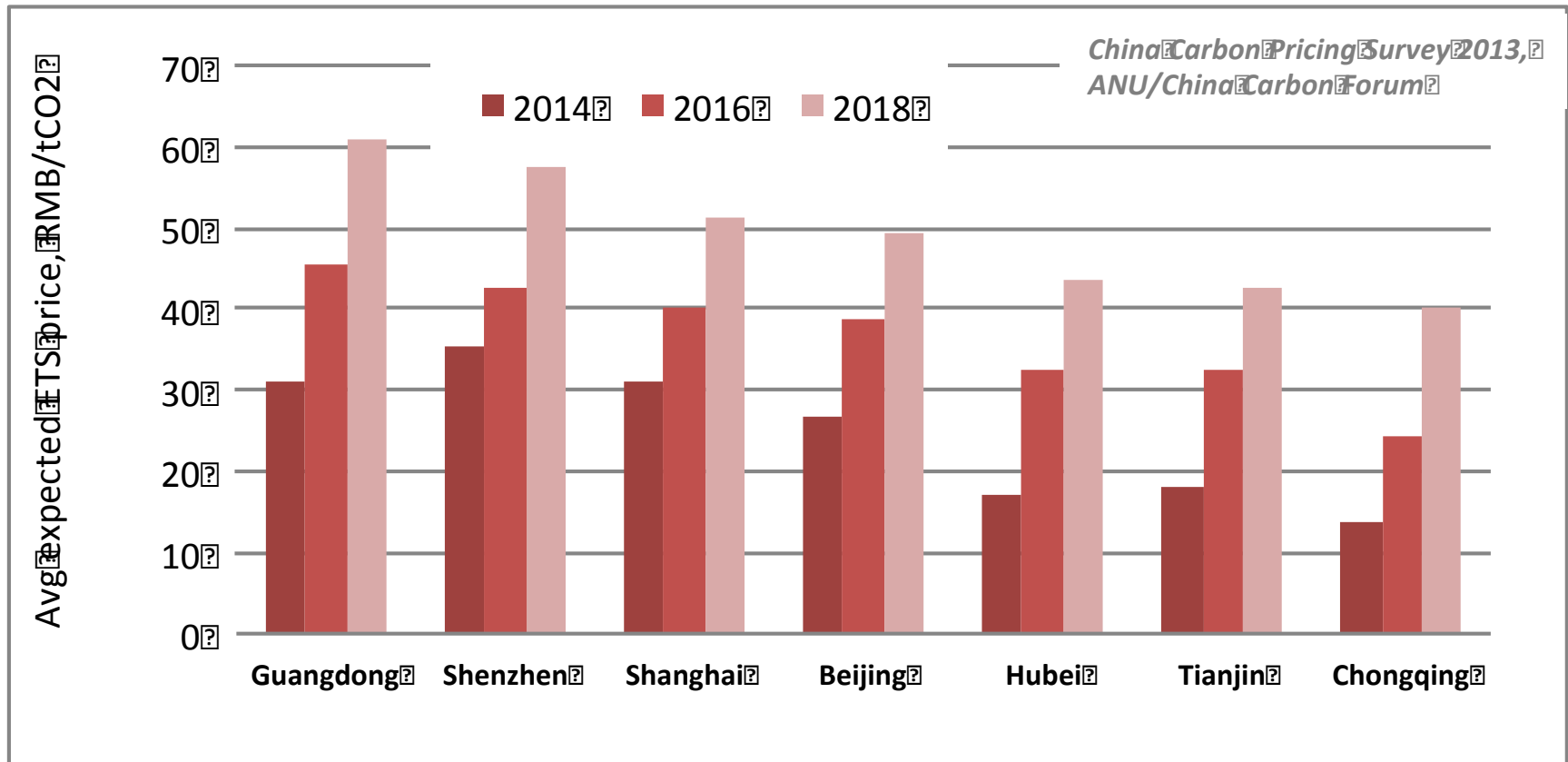
- Motivation?
 - Climate change
 - Air pollution
 - Energy security
- Command & control dominant
- But increasing role for market approaches
- 7 pilot emissions trading schemes
- National emissions pricing?

China Carbon Pricing Survey 2013

Paper at ccep.anu.edu.au (Jotzo/deBoer/Kater)



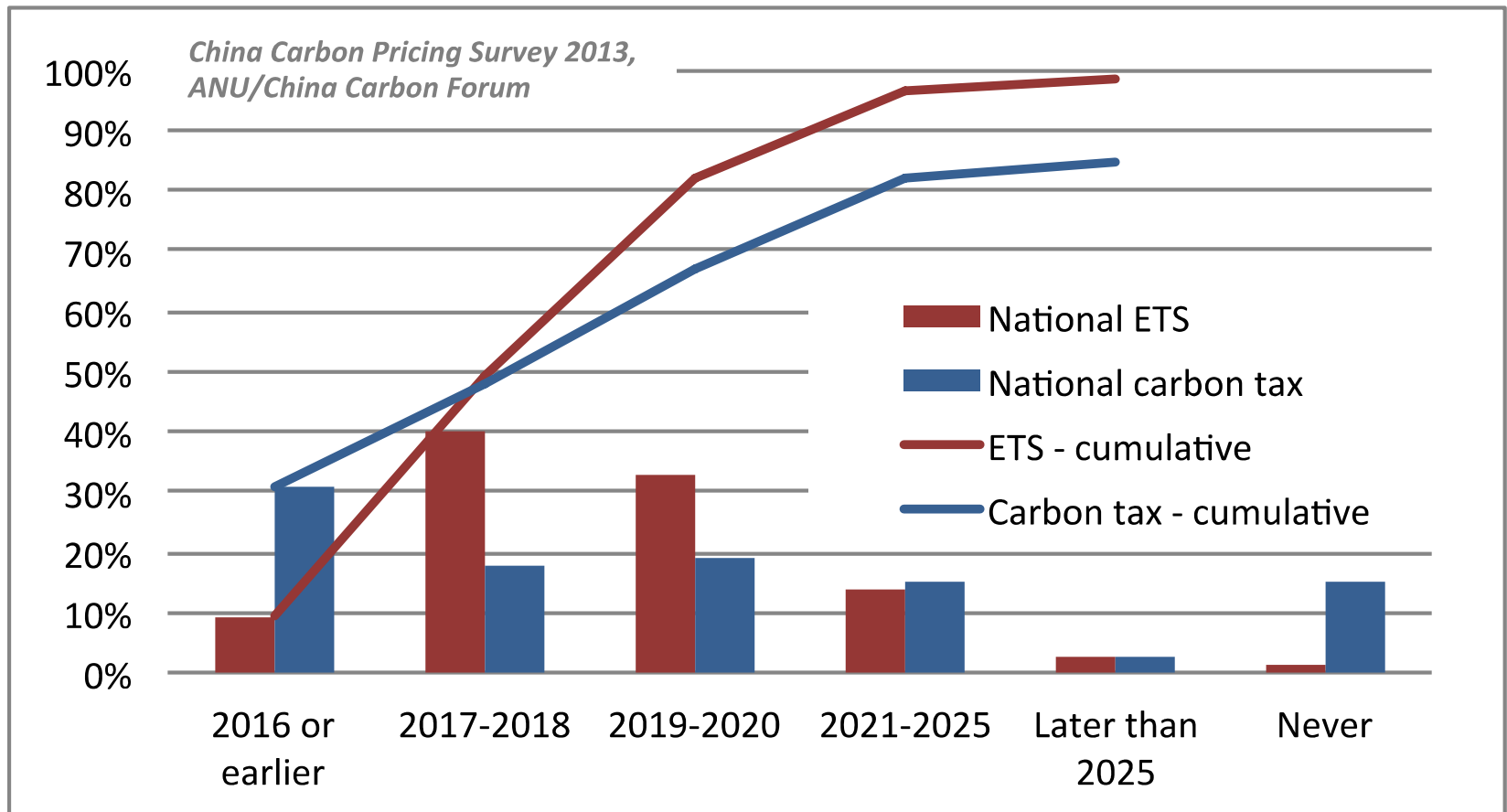
Expected prices for pilot schemes: sharp increases, big differences



China Carbon Pricing Survey (CCEP wp 2013)

Q7-13: You may have specific insights into likely prices for one or more of the pilot schemes. If so, what average carbon price do you expect to apply, if you believe it will be in operation?

National emissions trading and a carbon tax are both expected to be introduced

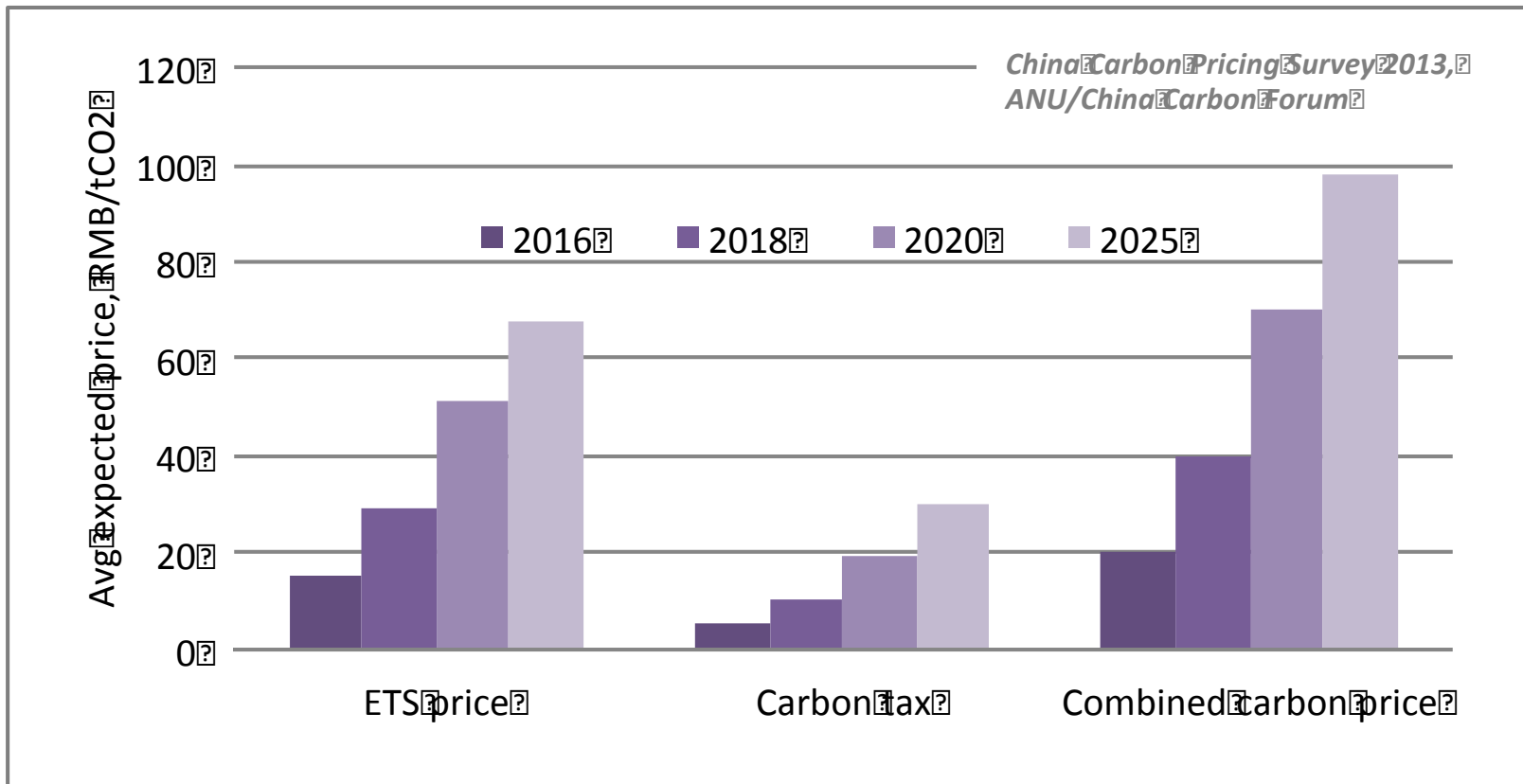


China Carbon Pricing Survey (CCEP wp 2013)

Q16. When do you expect that a national emissions trading scheme will start?

Q17. By when do you expect that a national carbon tax will be in operation?

Expected prices under national ETS and carbon tax rise quickly



China Carbon Pricing Survey (CCEP wp 2013)

Q18-19: What average carbon price do you expect to apply at different points in time, in a national ETS / carbon tax for China?

But will a carbon price be effective?

- Energy sector still heavily regulated
- Effect of carbon price limited without regulatory change
- Ultimately need energy market reform...

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