China’s Rapid Deployment of SO$_2$ Scrubbers

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China’s coal electricity has lower SO$_2$ intensity than the U.S.’

Source: EIA, 2008; NBS, 2001-2008; NDRC & SEPA, 2007
China’s unprecedented political will: “Scientific View of Development”

The deployment of \( \text{SO}_2 \) scrubbers

* China’s \( \text{SO}_2 \) scrubber capacity in 2008 referred to the middle of 2008, not the end.

Source: Ministry of Environmental Protection, 2008; NETL, 2007; EIA, 2007; China Electricity Council, 2005-2007
“The” policy for scrubbers’ performance

Source: NDRC & SEPA, 2007, entry-into-effect on July 1, 2007; EIA, 2007
Jiangsu province, 2007

Assumption: Datong bituminous coal, 34.6% thermal efficiency → flue gas rate: 3850 Nm³/MWh
Source: SERC (Nanjing office), 2008
Implications for CCS

• When to see CCS’ large-scale deployment
  – Technological maturity
  – Political will
  – Deployment speed

• A cost-sharing scheme
  – Coal power plants pay capital costs
  – Consumers cover O&M costs
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