

Market Based Mechanisms for Climate and Energy policy in China



ENVIRONMENT AND TRADE IN A WORLD OF INTERDEPENDENCE

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China, trade and climate

- 34% of China's energy consumption used to produce exports in 2006
- China's primary energy demand projected to double from 2005 to 2030
- Investment in China's energy-supply infrastructure ~ 3.7 trillion 2006 USD over 2006-2030

Key questions

- What market based mechanisms (MBMs) is China implementing on climate and energy?
- How are China's domestic efforts linked to trade policy?

Climate and Energy Framework

- Domestic framework builds on three pillars:
 - accelerate climate-friendly energy mixture
 - enhance science and technology capacity
 - **facilitate market-based mechanism (MBMs) for more efficient energy production and utilisation**

Examples

Supply Side	Demand Side
Energy Development in 11th 5 year Plan China Renewable Energy Law Renewable Energy in 11th 5 year plan Renewable Energy Medium and Long Term Plan Medium and Long-term Energy Development Strategy and Plan to 2020. Etc.	Energy Conservation Law 10 Key Energy saving Projects 2005-2010 Building Energy Saving in 11th 5 year plan Standards for building Energy Saving Etc.

Examples

Supply Side	Demand Side
China Renewable Energy Law Renewable Energy in 11th 5 year plan	

Renewable Energy (RE)

- 11th 5 yr plan RE targets
 - 10% by 2010 and 15% by 2020 from the current level of 3%
- China's RE Law (2006)
 - lower import tariffs for RE equipment
 - preferential taxation,
 - price subsidies,
 - subsidize grid connections

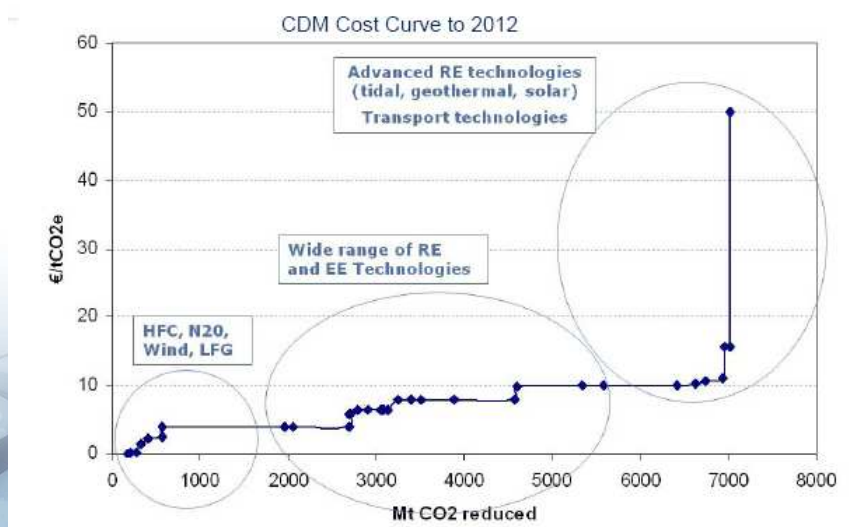
Climate Policy

- Clean Development Mechanism (CDM) in China
 - **one** component of market-based climate and energy framework
 - China generates between a third and half of all world CERs (30% of issued CERs)
 - CDM drawing in national and international resources - ca.13 billion USD global market

CDM in China

- Rapid growth in CER volume
- RE and energy efficiency (EE) increasingly important
 - Wind, hydro EE ca. 80% of CDM projects in pipeline
- fewer "low hanging fruit" projects
 - industrial gas (HFC, NO₂)

CDM supply



source: World Bank 2008

CDM in China

- Taxation of CERs by project type
 - 65% tax on industrial gas project
 - 2% tax on "preferred" project types (e.g. RE & EE)
- Price floor
- 51% ownership rule
- reduced tariffs for imported RE components

Energy Market Structure

- State Owned Enterprises (SOEs) dominate power landscape
 - ~ 40% Chinese wind CERs and 20% of all CERs.
 - More and more CDM projects are SOE owned
- Demand (from EU) for CERs also concentrated
- Engagement of these major players is key to effectiveness of MBMs

CDM Challenges

For public sector stakeholders:

- level playing field for domestic versus foreign actors
- government intervention vs. market mechanisms
- national priorities vs international climate cooperation

CDM Challenges

• For private sector stakeholders:

- benefits small given high risks, regulatory barriers (i.e. 51% rule), lack of regulatory enforcement, shortage of human and financial capital, etc.
- expectations drive implementation, not current regulation

CDM policy objectives

- Sustainable Development and regional disparities
 - Market based mechanisms don't work where the market doesn't work
 - poorest regions don't see much benefit from market based initiatives for clean tech

CDM policy objectives

- Strong interest on CDMs potential for technology transfer (TT)
 - Financial flows from CDM of limited interest
 - Trade in high tech components more interesting
- Evidence of some TT but below expectations
 - limited to some project types (EE)
 - not a private sector objective

Position on Climate (post 2012)

- China's international position includes *inter alia*
 - trade liberalization to support technology transfer
 - funding support for technology transfer
 - continued use of MBMs

Concluding remarks

- China's climate and energy objectives rely on MBMs and trade
 - CDM is an example where trade is key (TT, foreign capital)
- MBMs may be more economically efficient but not always easy to target
- Carrot or stick? what mix makes most sense? How do BTAs fit in?



Presentations from this panel will be available on www.entwined.se

For information on Climate Policy in China

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<http://www.euchina-cdm.org/>