The Institutional Framework for China’s Energy Transition

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The Question?

• Premise: A relatively rapid transition by China’s to a low carbon economy is critical for China and for the world

• Observation: some successes, some failures

• **Question:** What institutional factors may constrain or support such a transition?
  
  – Focus on the institutions of energy governance
  
  – These supplement constraints from geography, energy infrastructure and deep linkages with all aspects of economy
The way forward

• What to do:
  – Economic structure
  – Fuel mix
  – Energy conversion
  – Energy use
  – Environmental technologies
  – Esp.: transport, power, industry, urban design, household use

• How to do it:
  – Policy making
  – Policy design
  – Policy implementation & regulation
  – Technology/innovation
  – Awareness and collective action
What we see in the energy sector: more effective

– Pragmatic adoption of new ideas/approaches
  • Industry restructuring
  • Limited application to energy sector (economic interests)
– Climate change has risen up the agenda (new slogans)
– Infrastructure: extraction, transmission, transformation
– Certain targeted policy initiatives:
  • Closing inefficient plants; Rural electrification
  • Emission standards for vehicles
– New technologies: adoption & innovation; wind, solar, vehicles, CTL, ultra super critical plants,....
Energy sector: less effective

– Managing tension between:
  • energy & economic policies; energy & environmental policies
– Coherent energy policy:
  • Between and within energy sectors
– Enhancement of economic incentives
– Sector regulation at local level:
  • small mines, environment, wind farms, power plants
– Reliable statistics/information
– Acting against interests of large energy SOES
– New technology: innovation in SOEs, economic interests
– Societal values and behaviours?
1. Embedded institutions

2. Institutional environment

3. Institutions governing transactions

4. Behaviours

Drag/ Lubricant?

Friction

Friction

Coherence?

Events.
ideas, trends, information, challenges & technologies

Drive
1. Behavioural beliefs & internalized norms

• Roots - Hydraulic regime:
  – Highly centralised power
  – Critical role of ideology and preference for conformity
  – Family and informal networks substitute for civil society
  – Ritual & appropriate action/words >> ‘truth’

• Chinese Communist Party
  – Highly centralised rule and very hierarchical
  – Ideology, rhetoric and slogans
  – Networks and clientilism
  – False reporting and feigned compliance
1. Mental models and paradigms

• Man’s relationship with nature
  – Balance between man and nature
  – Man’s power to conquer and control nature
    • Hydraulic society

• Preference for self-sufficiency:
  – Fluctuated over time
  – Accentuated by late Qing dynasty and Communists

• State control of natural resources
  – Direct involvement in critical minerals
  – Relaxed attitude to other mining (cf medieval Europe)
1. Social capital

• “Traditional” social capital
  – Narrow circles of trust (e.g. family, business allies)
  – Formal mass organisations

• “Modern” social capital:
  – Trust: in others & in public institutions
  – Civic mindedness
  – Informal networks, civic society
1. Social capital

• Relevance:
  – Collective action
  – Innovation
  – ‘Bad’ aspects of social capital

• Social capital in China today:
  – Heterogeneity and change
  – Can it be mobilised for a public good – low carbon economy?
2. Formal institutions of the state

• Fragmented and heterogeneous state:
  – Poorly defined powers
  – Some SOES very powerful, especially in energy sector
• Multiple centres of power & institution building
• Political and economic rivalry
• Communist Party – the Glue
  – Crucial role in all political decision making
  – Modest democratisation; wider consultation
  – But, power still lies with an elite
  – and Ideological campaigns continue
2. Legal system

• More than 2,000 years of history:
  – Confucian and Legalist traditions
  – Promoting & protecting the interests of the state
  – No formal constraints on the ruler; no protection for the individual
  – Punishments were harsh: Dependent on the status of the individual
  – Private disputes settled through private ordering, not courts

• Tension with new (economic) laws
  – But rapid improvements in last ten years in the economic realm
Governance of China’s energy sector

• Continuity and path-dependency
  – Action and inaction; order and disorder; coherence and incoherence; AND

• Incremental, unpredictable short-term adjustments
  – Unsuccessful/partially successful initiatives
  – Stop-gap measures; AND

• Occasional radical and “unexpected” successes

• For preliminary account: See Note de l’Ifri, January 2010