

# The Institutional Framework for China's Energy Transition

*Philip Andrews-Speed*

# 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

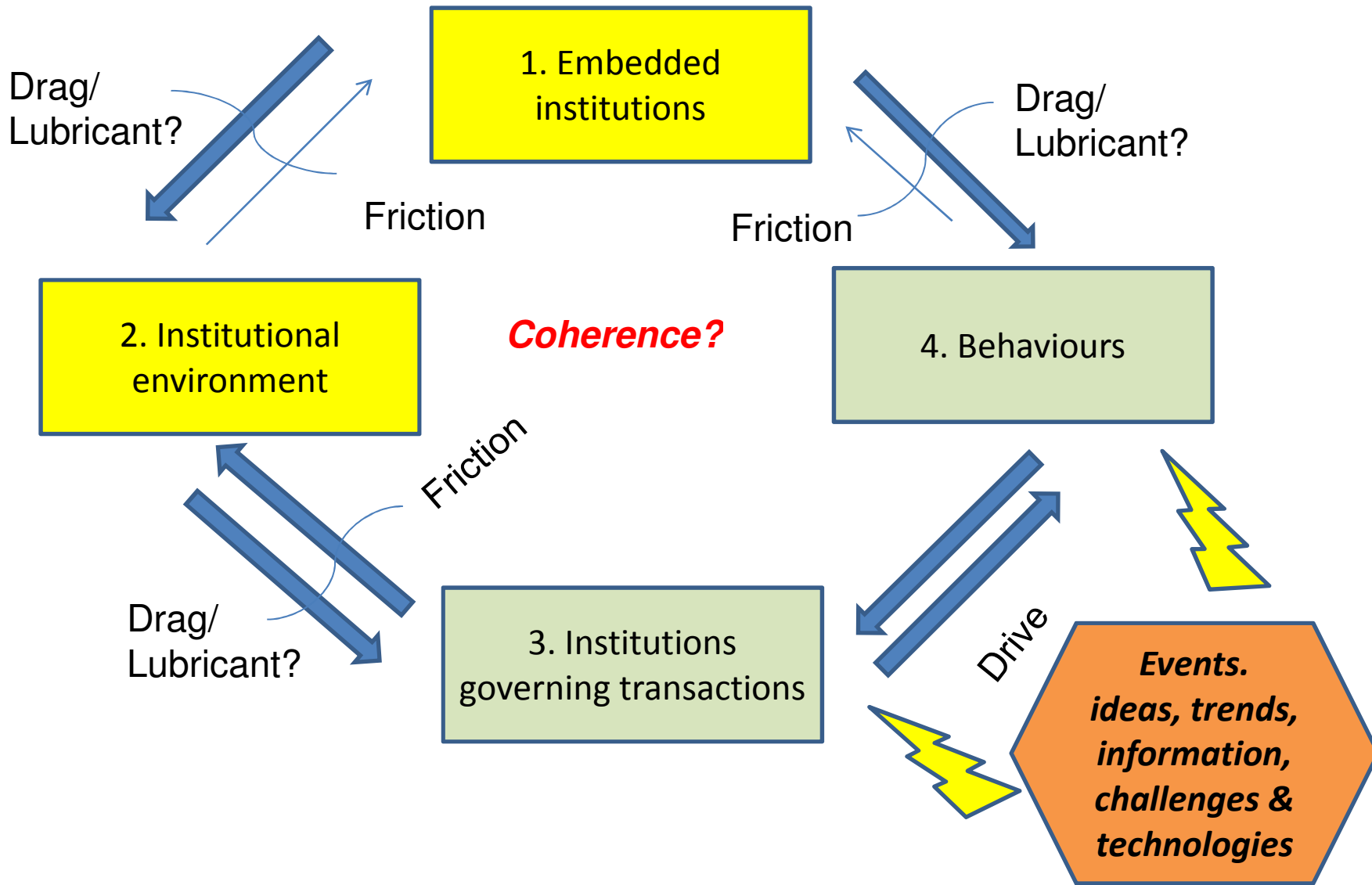
- What to do:
  - Economic structure
  - Fuel mix
  - Energy conversion
  - Energy use
  - Environmental technologies
  - Esp.: transport, power, industry, urban design, household use
- How to do it:
  - Policy making
  - Policy design
  - Policy implementation & regulation
  - Technology/innovation
  - 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. 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*