

Corporate Environmental Strategies in Emerging Economies

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**International Energy Agency (IEA)
Industry/Business Use of “Complementary Measures”
for Decarbonisation**

1. Emerging Economies

- Developing
 - » Physical, human resources
 - » Institutions
- Transition
 - » from reliance on govt allocation
 - » to market-based allocation
- China: special case
 - » Mix of developing, transition, developed

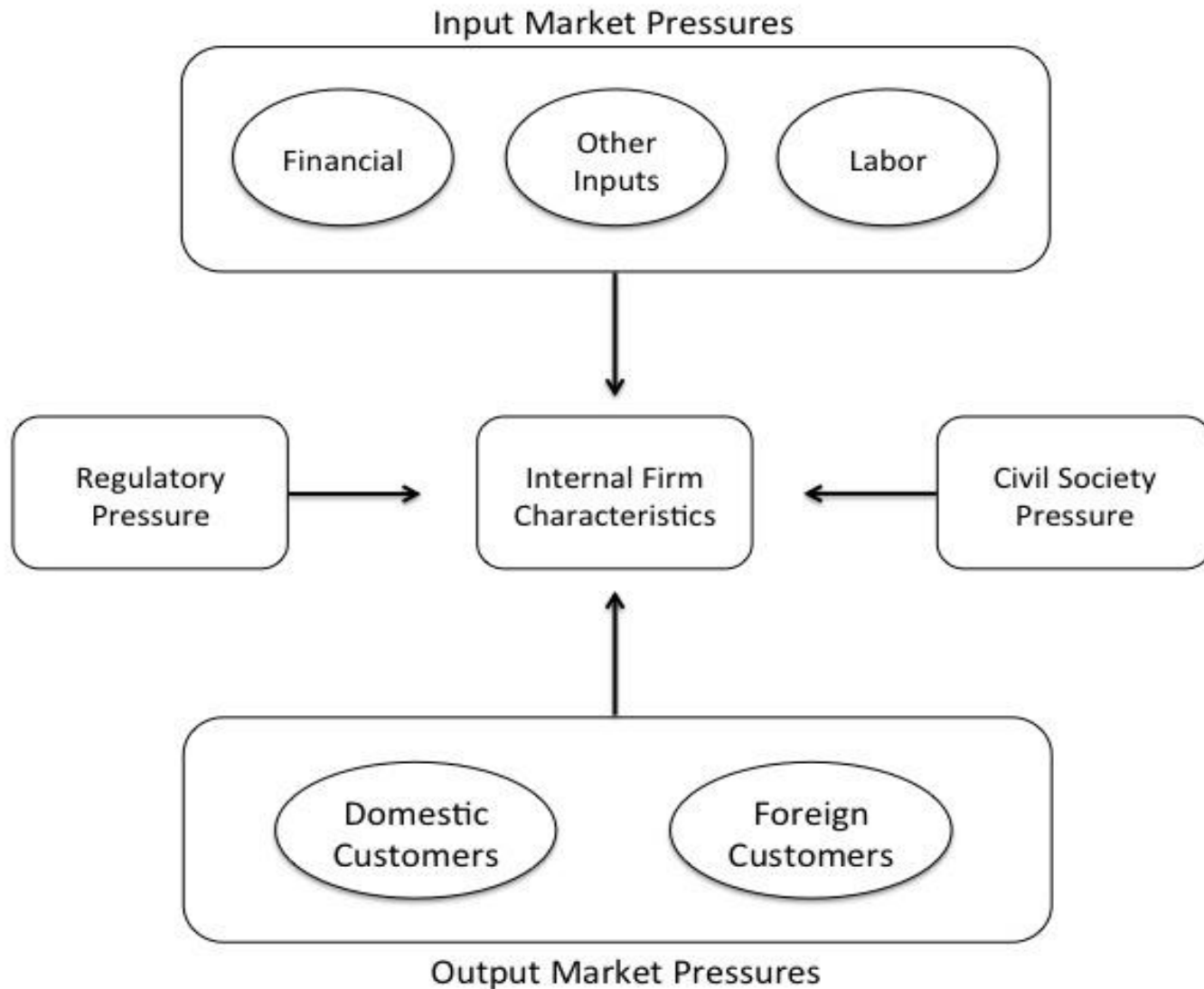
2. Insight from Research

- Better understanding
 - » Environmental management in general
 - » Conventional pollutants
- Meaningful transfer to “decarbonisation”
 - » Clean energy
 - » Energy efficiency

3. Firm Environmental Behavior

- Measures
 - » Clean technology adoption
 - » Environmental management system
 - » ISO 14001 certification
 - » Audit, pollution prevention program
 - » Environment department establish
 - » Environmental plan adoption
 - » Environmental training

3. Firm Environmental Behavior



4. Developing Economies

- Challenge
 - » Undeveloped institutions
- Opportunity
 - » More room to establish sustainable development path

4. Developing Economies

- Empirical Evidence of Drivers
 - » Foreign ownership: influential
 - » Foreign customer pressure: influential
 - » Government: weak
 - » Civil society: weak
 - » Information disclosure: promise for future

4. Developing Economies

- Empirical Evidence of Drivers
 - » Locally owned firms with products domestically consumed or exported to less “green” countries
 - Market pressure: weak
 - Law enforcement capacity: limited
 - Environmental pressure groups: weak

4. Developing Economies

- Empirical Evidence of Drivers (cont)
 - » Locally owned firms supplying customers in developed economies
 - Market pressure: influential
 - » Multinational corporations
 - ISO certification: more likely
 - Require suppliers too: more likely

5. Transition: Central and East Europe



Soviet-style Economies: Central and East Europe

Soviet Union Administrative Divisions, 1989

The United States Government has not recognized the incorporation of Estonia, Latvia, and Lithuania into the Soviet Union. Other boundary representation is not necessarily authoritative.



5. Transition

- Extensive transformation
- Fast transformation
 - 1989 to 2004 (1st EU)
 - 1989 to 2007 (2nd EU)



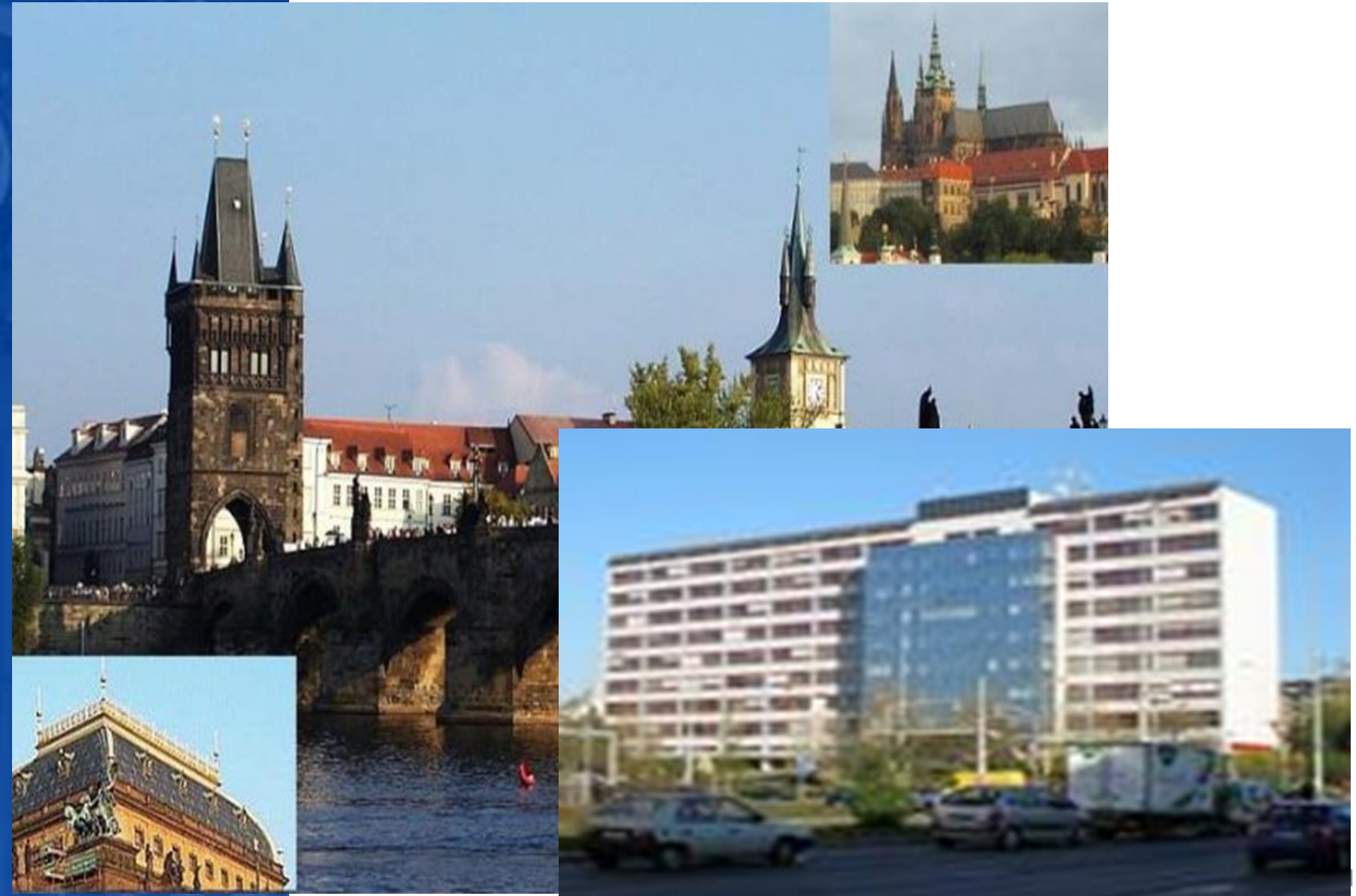
6. Transition Forces

- Price liberalization
- Privatization
- Budget constraint
- Enterprise restructuring
- Trade development
- Foreign investment / ownership
- Capital markets growth

6. Transition Forces

- Environmental Regulator
 - » Protection laws strengthening
 - » Capacity development
 - » Relationship: more adversarial

Czech Ministry of Environment



Czech Enforcement: 2001-2010

6. Transition Forces

- Civil society growth
 - » free speech
 - » independent press
 - » environmental NGOs
 - » access to environmental info

ANNUAL REPORT 2010 Czech Environmental Inspectorate



7. Transition Firm Behavior

- Drivers of better behavior
 - » Internal:
 - Need to reduce energy use: some practices
 - Private (vs state) owner: mixed
 - Foreign (vs domestic) owner: some practices
 - Export orientation: some practices
 - Foreign market pressure: some practices
 - Management-related internal pressure

7. Transition Firm Behavior

- Drivers of better behavior (cont)
 - » External: Regulatory
 - Permits: some practices
 - Self-reporting of emissions
 - Enforcement, inspections
 - Emissions charges
 - » External: Other
 - Community pressure: some practices
 - Public disclosure in media

7. Transition Firm Behavior

- Irrelevant factors:
 - » Investor pressure
 - » Customer pressure
- Comparison to Developing Economies
 - » Weaker roles
 - foreign ownership
 - foreign customer pressure
 - » Stronger role for govt policies

8. China

- Drivers of environmental behavior
 - » Emission charges
 - » Foreign ownership: moderate evidence
 - » Export orientation to Japan/EU
 - » Consumer pressure:
 - Foreign: more important
 - Domestic: less important