



Old wine in new skins?

Adopting voluntary agreements in Chinese state-owned industry

National Regulatory Environment

- Cleaner Production Promotion Law
- Energy Conservation Law
- Circular Economy Law
- 11th Five-year Plan targets (2005 2010):
- → 20% decrease of energy intensity
- → 10% reduction of pollution (SO₂, NO_x, COD)

Local Action

- Pilot Cities: Nanjing, Xi'an, Karamay
- Voluntary Agreements signed in April 2008
- Municipal Environmental Protection Bureaus
- 14 state-owned companies

Approaching Companies

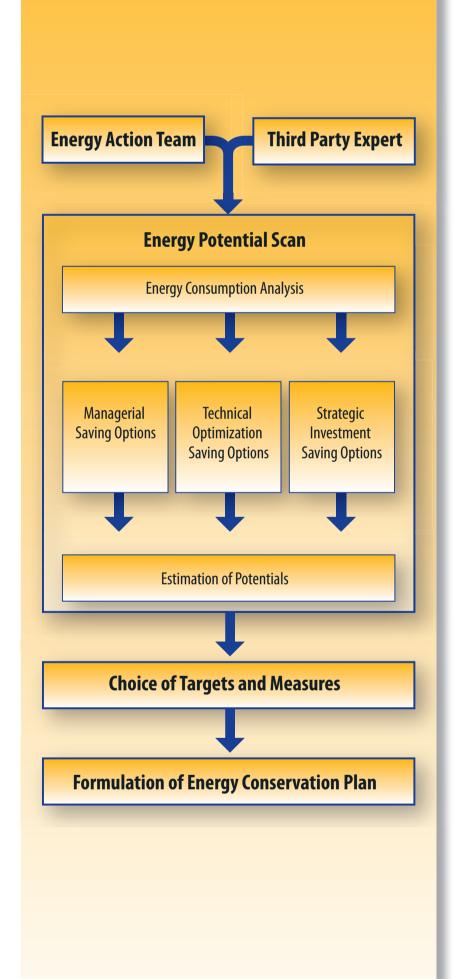
Incentives:

- 1. Subsidies out of the Environment Fund of local Environmental **Protection Bureaus**
- 2. Priority in awarding companies with the Environmentally Friendly Enterprise award
- 3. Simplified procedures for environmental permits for expanding production facilities



Negotiation

Energy Action Teams carry out an Energy **Potential Scan**



Signing Agreements

Aggregate targets (2007 - 08):

- Energy saving: 10-18 PJ (3-5%)
- Reduction of CO₂-emissions: 1.1-2.0 Mt (3-5%)
- Reduction of waste water: 62-93 Mt
- Reduction of solid waste: 0.26-0.45 Mt
- Reduction of SO_X and NO_X: 3-90%



Implementation

Selected Measures

Technical

- Heat recovery
- Improved boilers Fuel switch from oil
- to gas
- Use of solar energy (PV)
- Improved preheating processes
- Optimized kilns

Managerial

- Training of manangers and auditors
- Introduction of clean production auditing
- Introduction of new environmental management systems



Monitoring









Supervision Visits

Annual Advisory &



Drivers

- Notorious implementation gap of national laws and regulations
- Need for a flexible and pragmatic approach to encounter high national requirements
- Incentives offered by environmental authorities

Success factors

- Strong process management: targets and concrete measures to achieve them
- Partnership approach: overcoming the power divide between enviornmental authorities and industry
- Relatively small financial subsidies stimulate investments

Authors

Urda Eichhorst and Daniel Bongardt

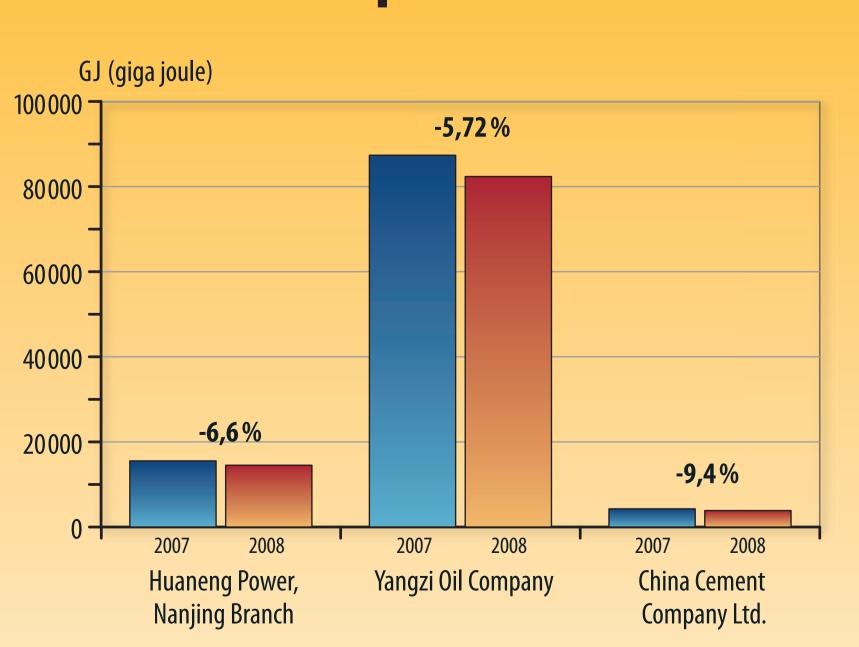
(Wuppertal Institute for Climate, Environment and Energy), urda.eichhorst@wupperinst.org

Paper ID 5012

Findings

- → Implementation tool to overcome traditional institutional constraints at the local level
- → Yet, rationale essentially the same as in the EU: employing a flexible instrument to overcome complex environmental problems

Preliminary Energy Savings in Selected Companies



Project Partners

SenterNovem (project coordination), Wageningen University, Environmental Protection Bureaus of Nanjing, Xi'an and Kelamayi, Nanjing Research Institute for Environmental Protection

Supported by the EU AsiaProEco II Programme