Pan Tao, Dec.2003



Outline

- What is GHGs Emission Trading
- GHGs Emission Trading Status
- China Status

What is GHGs Emission Trading

Coase Theory

- GHGs Emission characteristic
- > Homogeneous
- Cost difference

What is GHGs Emission Trading

Key Elements

- Commodity: Permits & Credits
- Objective: Cost efficiency
- Stimulation: Free will/force/penalty
- Rule: Transaction, Registration, Report, Monitor
- Linkage: Primary & Secondary

What is GHGs Emission Trading

Definition

An aggregate based on permits/credits trading among participates (mainly companies) that be pushed by simulation policy under certain rule/framework in certain field in order to reduce GHGs emission cost effectively.

- Developed countries and multinational companies practice
- EIT countries and developing countries participate
- Fund

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State/ Organiz ation	Time	Commodity	Field	Stimulation	Linkage	Status
Canada (GERT)	98~	Credit	Energy/RE generation	Free will	North America	2 pilot projects/ free will credit anticipant
Australia	00~	Credit	Sequestration	Free will	Yes	Cooperation agreements with Japan and NZ
(SFE)	01~12	Permit	160 biggest sources	Free will	NA	NA
BP	00~	Permit	internal	Free will	CDM & JI	\$20/t-CO2, 361,000t-CO2 being traded
Shell (STEPS)	00~	Permit	internal	NA	No	NA
German	00.8~01. 5	NA	NA	NA	No	Internal pilot trading
U.S (CCX/Io wa/VEA A)	03-06 99~	Credit	Energy/ Land use	Service	Yes	CCX 0.98\$/t-CO2 auction Emission trading law in some states
Denmark	01-03	Permit	Power generation	Penalty DKK40(\$6)/t -CO2。	Yes	22Mt-CO2e ER in 2001, 21 MtCO2e ER in 2002 and 20 MtCO2e in 2003. System improved.
UK	02-06	Permit & Credit	6000 companies	Subsidy/Ta x	Yes	4~6 Pounds/t-CO2 for free will and 53.37 Pounds/t-CO2 for auction.
Norway	05-07	Permit & Credit	Smelt/Cement/petrol eum	Free will	CDM & JI	Framework underway
EU	05-08	Permit	Energy/Energy intensive	Penalty/Tax	Secondary	Directive finished. 10Ero/ t-CO2 for 12 pilot trading.
New Zeland	08-12	NA	NA	NA	Australia	Gov. attitudes clear.
Japan	NA	NA	NA	NA	CDM & JI	METI gain support of 10 big companies

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State	Experience	Attitude
Bulgaria	MOU with Dutch/ERUPT/PCF Agreement	Primary JI/ Internal Trading Framework discussion in Gov. level.
Croatia	MOU with Dutch/PCF underway	Possible JI/ET
Estonia	AIJ/JI	Temporarily outside
Hungary	MOU with Dutch/PCF Agreement/AIJ/PCF	Primary JI/ Initial ET research
Latvia	PCF projects/AIJ/JI	NA
Lithuanian	AIJ	Primary JI/ET
Rumania	PCF Agreement/AIJ/JI	NA
Slovak	MOU with PCF/AIJ/ERUPT	Focus on ET
Slovenia	SS JI/MOU wit Austria underway	Primary ET
Poland	MOU with Dutch and Norway/PCF Agreement/AIJ/JI/ERUPT	JI/ET/2005 introduce ET to national policy
PRC. China	CDM capacity building/4AIJ/1个CERUPT	Higher CDM price
Brazil	CDM capacity building and several CDM project cooperation	CDM
India	CDM capacity building and related fund established	CDM

ERUPT :

2000 established and operated by Dutch Gov. JI. \$4.75/t-CO2. 4th group submission start.

CERUPT :

2001 established and operated by Dutch Gov. CDM. \$3-5/t-CO2. 3rd group submission start.

PCF :

2000 multi-established, operated by WB. JI/CDM. \$3-4/t-CO2. 26 Transaction agreement according to US\$106Millon

• Other new fund :

CDCF/ BioCarbon Fund/ CDM Facility/ Singapore-ASEAN Carbon Fund/ German Developing Bank...

Invest companies

- Developed Countries have establish territorial GHGs ET framework or underway to establish.
 Active direct trading and linkage liability.
- EIT and Developed Countries participate in ET indirectly through project cooperation.
- Increasing fund, mainly concern credit.

➡ International GHGs ET come into being.

China Status

Advantages

special management & researchReal CDM project cooperation40%share and stable investment environment

Disadvantages

Slow CDM progress Policy neither detail nor clear Limited GHGs ET research Source :

[1] http://unctad.org

[2] www.pointcarbon.com

[3] www.natsource.com

[4] www.co2e.com

Thank you all !