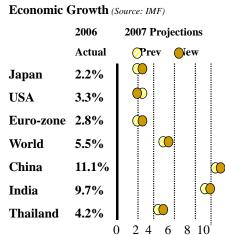
Information Disclosure Strategy for Enhancing Corporate Environmental Management 企業環境管理強化への情報開示戦略

Dr. Xianbing LIU Senior Policy Researcher Kansai Research Centre, IGES

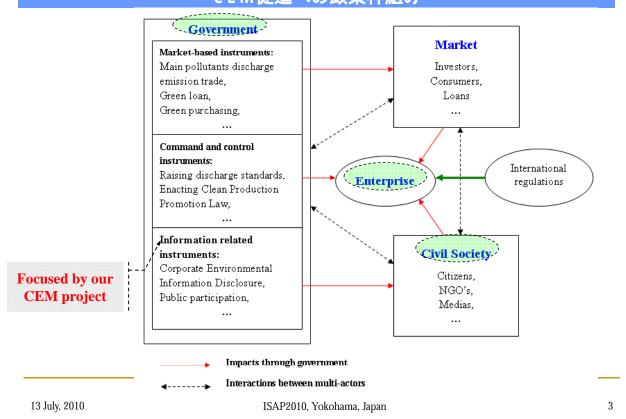
Target Countries of CEM Project at KRC (FY2007-2009) CEMプロジェクトの研究対象国

<u>Project Title:</u> Proactive Policies and Business Strategies for Strengthening Corporate Environmental Management in Developing Asia

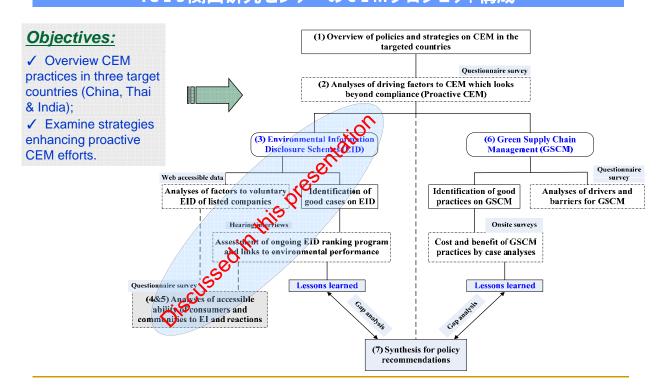




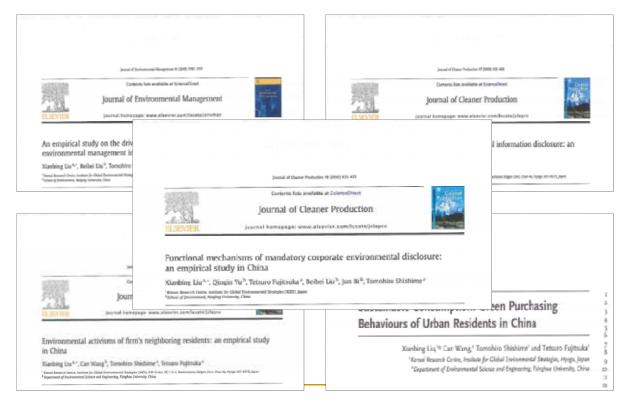
Overall Policy Frame for Enhancing CEM CEM促進への政策枠組み



Components of CEM Project at KRC/IGES IGES関西研究センターのCEMプロジェクト構成

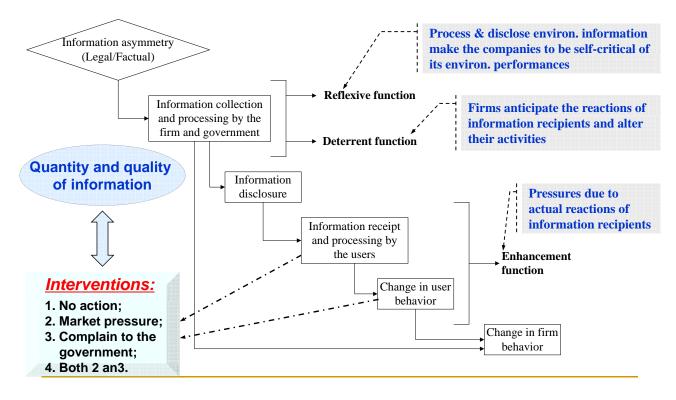


Research Outputs of EID Part EID研究成果物

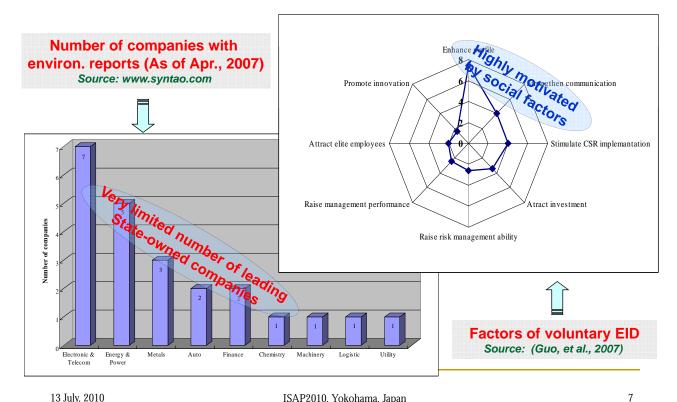


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Functions of EID Strategy EID政策の働き



Voluntary EID in China 中国に自主的なEID



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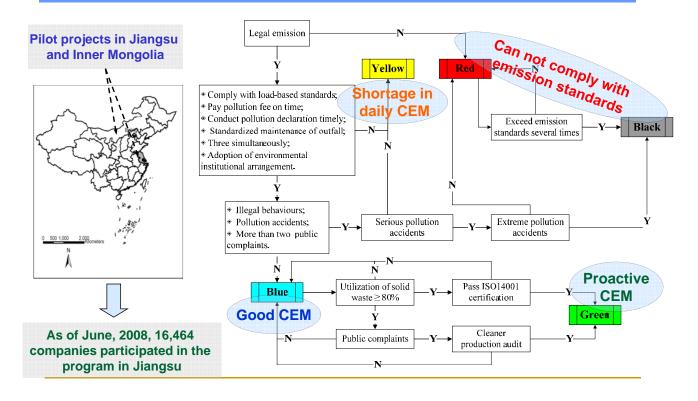
Voluntary EID of Indian Companies インド企業の自主的なEID

Sector No. of firms		Sector	No. of firms				
	Private	Public	Total		Private	Public	Total
Manufacturing	60	17	77	Service/Others	38	32	70
Automobile	6	0	6	Banking and financial services	6	20	26
Automobile ancillaries	3	0	3	Computer software	8	0	8
Cement	7	0	7	Hotel and tourism	2	0	2
Chemicals Env	ir <mark>o</mark> n. ir	nform	ation	on the web or annu	al	0	2
Cosnreport toft 1947	most	valua	błe co	mpanies from 23 se	ectors	was	4
Food and beverappalita	tively	monit	ored	Source Indian CEM re	eport)	1	8
Machinery	8	5	13	Electricity generation	3	2	5
Metal and metal products	6	3	9	Media	2	0	2
Refinery	2	7	9	Storage and distribution	0	3	3
Textiles	1	0	1	Trading	1	0	1
			4	Diversified	4	5	9

Inf. Items Observation sanufacturing	Service/Othe	ers	In total		
Private Public To Higher EID level of manufacturii	otal Private Pu	ublic Total	Private	Public	Total
Green supply chair initiatives partied are active in			Part of the second of the seco	0	7.5
Green operatio Unable to judge the information			⁷ data	42.9	64.0
Climate changen financial rence frequency 10		3 8.6	11.2	6.1	9.5
Renewable ene เลืองเล่นลง yolungtary EID 4 กุ India 26	6.0 7.9 3 ²	1.4 20.0	16.3	36.7	23.1

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Mandatory EID Program in China 中国に強制的なEIDプログラム



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Behavioral Changes of Participating Firms 参加企業の行動変化



Sector	2005		2006		
	Number	Percentage	Number	Percentage	
Dyeing and textile	90	43.9	107	43.1	
Chemicals 70% sl	naged by t	top ₆ three s	ectors	14.9	
Metal processing	20	9.8	22	8.9	
Pulp and paper	7	3.4	7	2.8	
Power plant	8	3.9	10	4.0	
Sewage plant	14	6.8	17	6.9	
Others	33	16.1	48	19.4	
In total	205	100.0	248	100.0	

Distribution of program participating firms (Sourced from local EPB)

Changes of rating results of 2005 and 2006 (Sourced from local EPB)

<i>'</i>						
Rating		In total				
results of 2005	Black	Red	Yellow	Blue	Green	
Black	<u>0</u>	0	0	0	0	0
Red	7	19Ma	20 nta <u>60</u> ed.	Promote	ed: 51	49
Yellow	0	7	nta <u>id</u> ed	27	0	94
Blue	Demo	oted: 38	21	5625	1	51
Green	0	0	1	2	<u>4</u>	7
In total	7	26	102	61	5	201

Functions of EID Program EIDプログラムの働き

Function items	Obs.	Mean	Std. dev.	Min.	Max.	
Panel A: Program effects perceived by the fir	ms					
a. Enhanced enforcement by eavironderial evesponse	anticipated l	y the firm	s forenviro	n.¹burea	ius ⁵	
b. Complaints and protest of neighboring communities	32	2.69	1.26	1	5	
c. Complains and boycotts from environmental NGOs	The firms d	2.31	1.38	1	5	
d. Boycotts of individual consumers	the other st		s 1.53	1	5	
e. Decreased trust and cooperation of business partners	would serie			1	4	
f. Reduced investment from the investors	31	2.38	1.39	1	5	
g. Stricter checking or suspend of the loan from banks	29	2.94	1.64	1	5	
Panel B: Actual pressure felt by the firms after	er the disclos	ure				
a. Enhanced enforcement by environmental bureaus	31 Mode	rate45	1.26	1	5	
b. Complaints and protest of neighboring communities	31	2.68	1.40	1	5	
c. Complains and boycotts from environmental NGOs	30	2.19	1.30	1	5	Due to
d. Boycotts of individual consumers	30 We	ak2.19	1.33	1	5	green cred
e. Decreased trust and cooperation of business partners	32	2.94	1.29	1	5	Policy ?
f. Reduced investment from the investors	32	2.72	1.44	1	5	
g. Stricter checking or suspend of the loan from banks	31 Mode	rate ₅₉	1.58	1	5	
Panel C: Role of the program to firm's interna-	al modification	ns				
a. Better processing of internal environmental information	31	3.19	0.95	1	4	
b. More aware of the environmental compliance status	lelp thé firms	be eleare	er ôf ^l ênviron	1. 1	5	
c. Better coordination of internal organizational units		an <u>ge</u> ⊛tatu		1	5	
d. More self-critical of environmental performance	performa	ange impro	ovement	1	5	
e. Making environmental efforts proactively	31	3.61	1.09	1	5	

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Major Findings and Policy Implications 主要研究結論·政策含意

- Marginal level of voluntary EID in India and China;
- The statistical summary shows the efforts of mandatory EID program participating companies;
- The worse environmental performers would more likely improve their environmental performances;
- Lack of CEM capacity and poor daily environmental maintenance are problems for worse rated companies;
- Interviews confirm a major objective of CEM in China to be compliance of regulations;
- The EID program has generated less pressures from external stakeholders other than the government for enhancing CEM;
- EID strategy could work effectively in combination with other policy tools;
- Due to the sensitivity of firms to market stakeholders, further efforts shall be made to provide the market actors with easier access to environmental information of companies.

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Thank you for your attention!

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