

CARBON DISCLOSURE PROJECT

Carbon Disclosure Project
Report 2008
Asia ex-Japan

On behalf of 385 investors with assets of \$57 trillion



Report written by ASrIA



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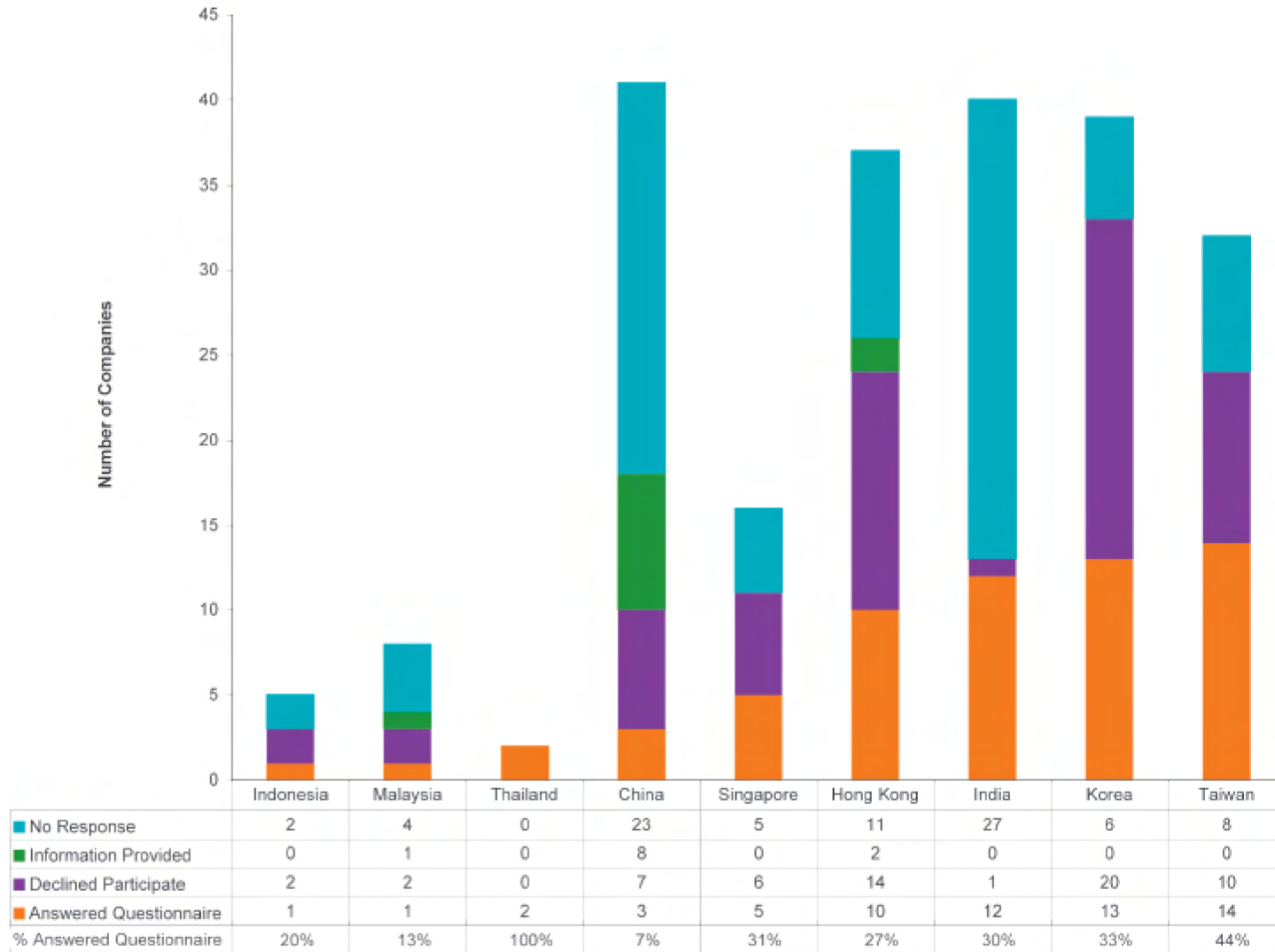
Carbon Disclosure:
Storms and Supply Chains

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CDP6 Asian Metrics

Companies surveyed	220
Response rate	28%
Highest response by country	Taiwan 44%
	Korea 33%
	Singapore 31%
Country with largest # of new respondents	Taiwan
Respondents with emission disclosures	24
Country with largest # of emission disclosures	Taiwan
Respondents with registered CDM projects	7
Most comprehensive response	CLP
Largest new respondent	China Shenhua Energy

Asia 220—Response Profile



Extreme Weather Risks in Focus

- *70% of respondents cited physical risks linked to climate change*
- *From random event to material risk—Asian companies moving to mitigate*
- *Flooding, wind damage, drought, and dust storms top the list of risks*
- *Economic impact high due to Asian demographics and supply chains*
- **HK Electric, CLP, MTR, China Merchants, CNOOC** *disclosed specific weather risks and strategies*

Weather Risks—The Specifics

- **HK Electric** *Lamma Power station is vulnerable to severe typhoons and flooding*
- **CLP** *Conducts “super-typhoon” drills*
- **China Merchants** *Cites typhoons and higher sea levels as a threat to operations*
- **CNOOC** *Sees weather risks “increasing” due to climate change*

Companies Reporting Emissions Data by Country

Taiwan	10 (83%)
Hong Kong	8 (80%)
Korea	9 (69%)
Thailand	1 (50%)
India	5 (42%)
Singapore	2 (40%)

Emissions Disclosure by Taiwan Respondents

Company	Scope 1		Scope 2		Scope 3	Carbon Intensity	Emission Reduction with Targets
	A	F	A	F			
Yuanta Financial Holdings							
AU Optronics	√		√		Qualitative		√
China Steel	√		√			√	
Asustek Computer Inc							
Acer Inc.	√		√		Part		
Chi Mei Optoelectronics Corp.	√	√	√	√			√
Compal Electronics	√		√				√
Delta Electronics	√		√			√	
Foxconn Technology					Planning		
High Tech Computer							
Hon Hai Precision Industry Company Ltd					Qualitative		
Siliconware Precision Industries Company	√		√		Qualitative	√	√
Taiwan Semiconductor Manufacturing	√	√	√	√	Part	√	√
United Microelectronics	√	√	√	√	Part	√	√

A – Actual, F -Forecast

Climate Change Policies—Companies in a Vacuum

- *28% response rate despite lack of government guidance*
- *Companies in Korea and Taiwan anticipating tougher measures*
- *HK and China companies focus on energy efficiency and wait*

Finally—Operational Data

- *Baseline data critical to company analysis and operational targets*
 - **Foxconn** will use 2008 as the base year for its inventory
- *Energy and water usage data help complete the picture*
- **CLP, Wipro, and KEPCO** have developed scenario analyses to evaluate climate change adaptation choices
- **Cathay Pacific** takes emissions impacts into account with capex decisions

Metrics Define Operational Changes

- **ICBC** *Cut loan exposure to borrowers with high energy consumption from 4.5% to 3.9%*
- **Cathay Pacific** *24% improvement in CO₂/RTK between 1998-2007; goal of 25% improvement between 2005-2020*
- **Tata Steel** *Target to cut CO₂ intensity/tonne crude steel produced by 18% to 1.8 by 2010*
- **KEPCO** *Cut peak demand in 2007 by 3,071MW through demand management programs saving \$1.2bn*

Climate Initiatives

Company	Initiatives	Implementation	Strategic Opportunity
ICBC	Green credit loan product	Taking a scientific approach to social responsibility via green project funding	Focusing on long-term investment benefits from green credit products
CNOOC	Offshore wind farm and carbon re-injection	Direct involvement in innovative ways to reduce carbon emissions as an oil company in China	Carbon emissions projects could become a core competence and generate new customer opportunities
HK Electric	Offshore 100 MW wind farm	Working with the HK government to assess new sources of renewable energy and complete EIA for wind project	Could gain valuable experience in offshore wind projects
Hynix	CDM project to cut PFCs	Created a taskforce to evaluate PFC CDM project with an estimated 30,000 CERs/ year potential	Could become a leader in new PFC abatement strategies for semiconductor companies
Hyundai Motor	Mass introduction of hybrid vehicles	Releasing a hybrid Elantra in 2009 and evaluating hybrid parts suppliers for further expansion	Working to establish a competitive position in the global hybrid car market
KT	Green data centers	Deploying energy efficient servers, recycling used equipment, and installing base stations with other carriers	More energy efficiency in core operations will result in near-term cost-savings
POSCO	Bio slag project to capture CO2	Potential for rapid scale up if pilot project meets objectives	Committed to pioneering new technology solutions for emissions reduction
ITC	Carbon positive & renewable energy use	CDM projects and forward-looking initiatives including reforestation	Strategic commitment to broadbased sustainability processes
Wipro	Various business opportunities	Greenware PC range and eco-friendly designs in other products; green IT consulting	Developing a potentially profitable consulting arm
AU Optronics	Voluntary credit scheme	Exploring best practices standards linked to company's environmental footprint	AU Optronics could mainstream the credit scheme to the Taiwan manufacturing sector
PTTEP	Carbon capture & storage; waste gas recovery	Investing in 40 projects in 14 countries to mitigate its climate risk	Sees carbon markets and cost-reduction opportunities through carbon capture