

# **Corporate Environmental Management : A Research Outlook**

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Sustainable development based on triple bottom lines – a balance between environment, economy and societal welfare is of paramount importance for rapidly industrializing Asia. In industrialized economies, the first generation of emission and pollution control involved applying traditional legal remedies such as emissions standards. Over time however, it became clear that these traditional regulatory approaches to protect environment were excessively costly in some circumstances and incapable of achieving the stipulated goals in others. Failures have been especially common in developing Asia, where legal and regulatory institutions are often weak. Neither staffs nor budgets are adequate for the task of regulating all of the potentially harmful substances emitted by firms. As a response to these deficiencies the second generation of environmental protection focused on market-based approaches such as tradable permits, emission charges, deposit-refunds and performance bonds. Even the addition of market-based approaches, however, has not fully solved the problem. In the industrialized countries the system remains overburdened by the sheer number of substances to be controlled. In many developing countries in Asia, these difficulties are compounded by the problems associated with designing, implementing and monitoring market-based approaches.

To counter these problems, in the evolution of environmental protection is voluntary corporate environmental management (CEM). CEM shall be defined as commitment of business to behave ethically and become environmentally responsible by moving beyond compliance as well as shifting from reactive to proactive. Evidences– both theory and practice is needed to develop new public policies and partnerships that can be effective in promoting voluntary measures. But not much detailed information is available, although the importance of moving beyond compliance is felt by wide range of stakeholders. This research project focus on such tools as environmental information disclosure schemes for self-regulation. Pursuing environmental excellence always require significant amount of technical information and resources. But many of the small and medium enterprises (SMEs) don't have. Mentoring programmes based on Supply Chain Management (SCM) principles can help bridge this technical or resource gap and pave the way for them to become environmental leaders.

The immediate objective of the research project is to outline innovative policy tools and discuss promising CEM pathways to propose an enabling policy framework. This research is envisioned to be a multi-country sectoral focused study with common but differentiated interests. Though geographically distinct the economies targeted for the research-China, India and Thailand share a common dais; rapid economic growth through aggressive industrialization and resultant environmental vows. The objectives of the workshop are multiple (i) to enhance the understanding on the actual situation and problems with CEM in the target countries (ii) to identify other uncovered issues and design an optimal research protocol (iii) To inform and elicit KRC stakeholders' opinions at an early stage of the three year research project.

# Corporate Environmental Management *-A Research Outlook-*



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# Outline

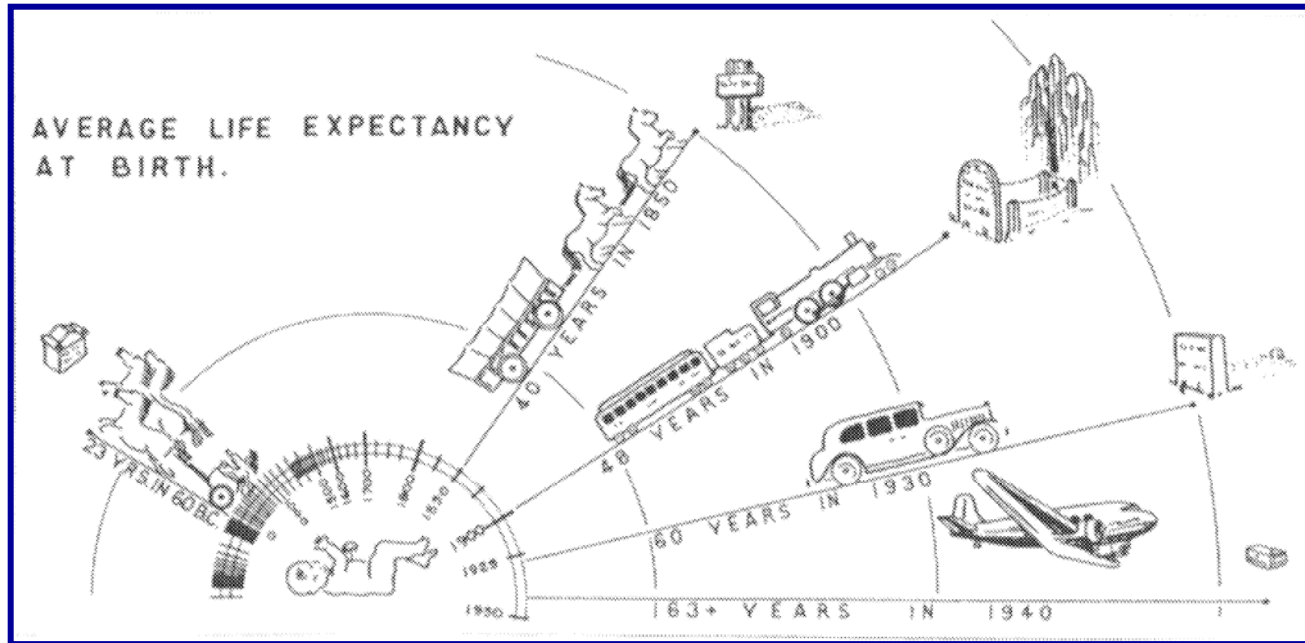
I. Why Business & Environment?

II. When & Where KRC research is focused?

III. What is Corporate Environmental Management? Emerging concepts and a research outlook.

IV. What are the objectives of this workshop?

# Business Impact on the Society

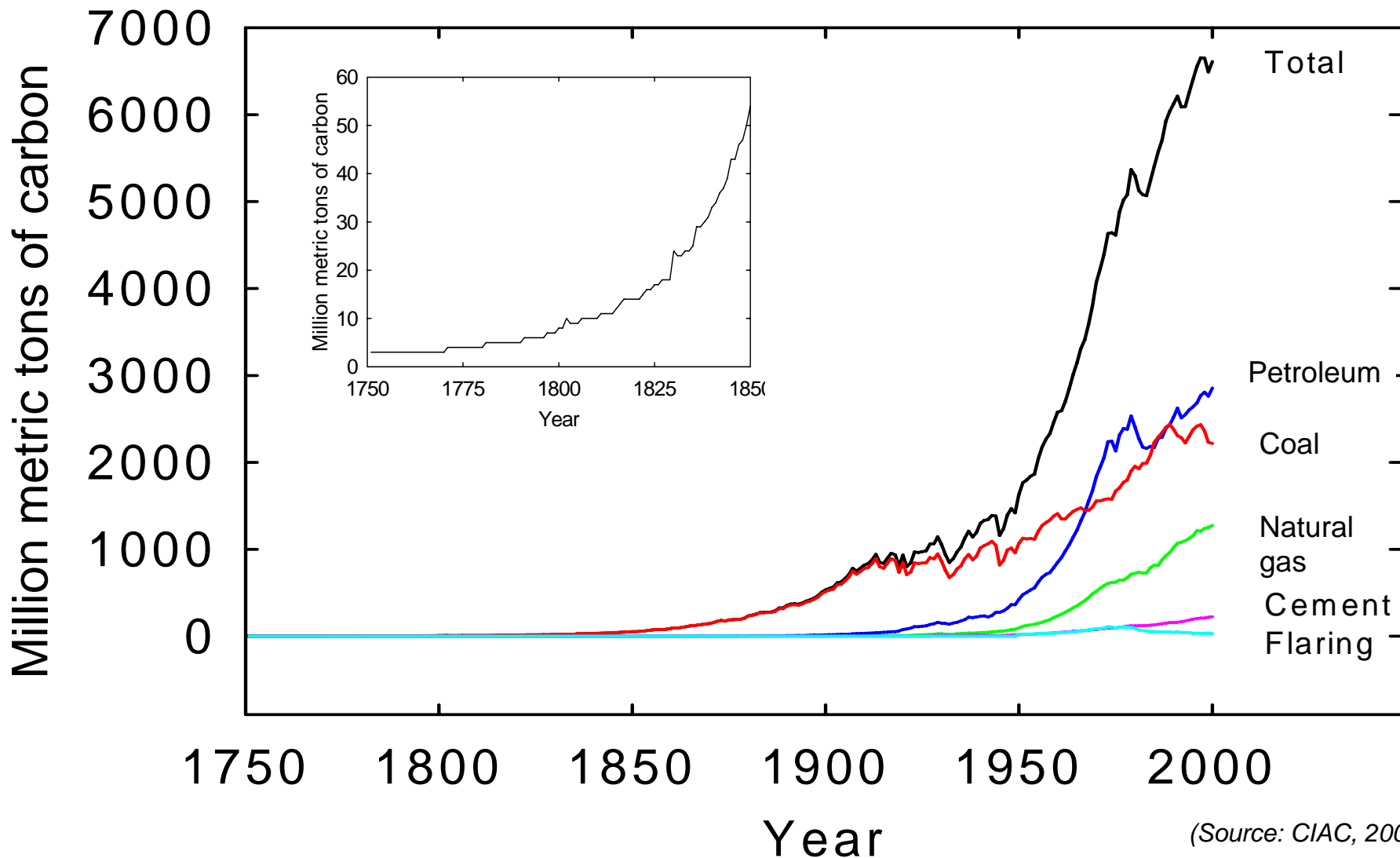


85+ years  
2007

(Source: Technology Review, 1941)

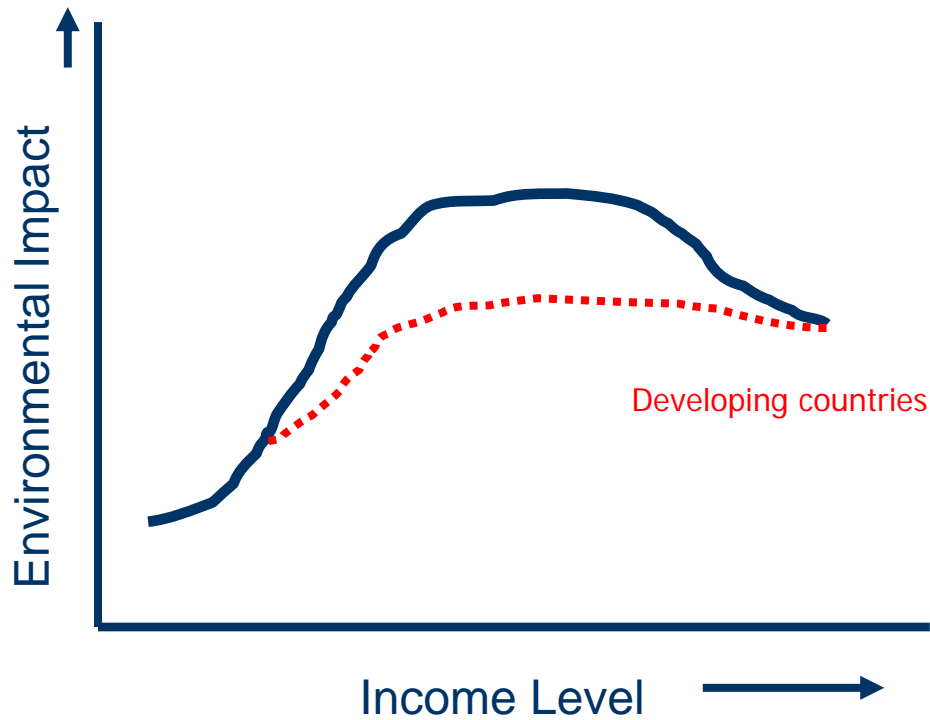
# I. Why Business & the Environment?

# Business Impact on the Environment (1)



(Source: CIAC, 2003)

# Business Impact on the Environment (2)



Japan



India

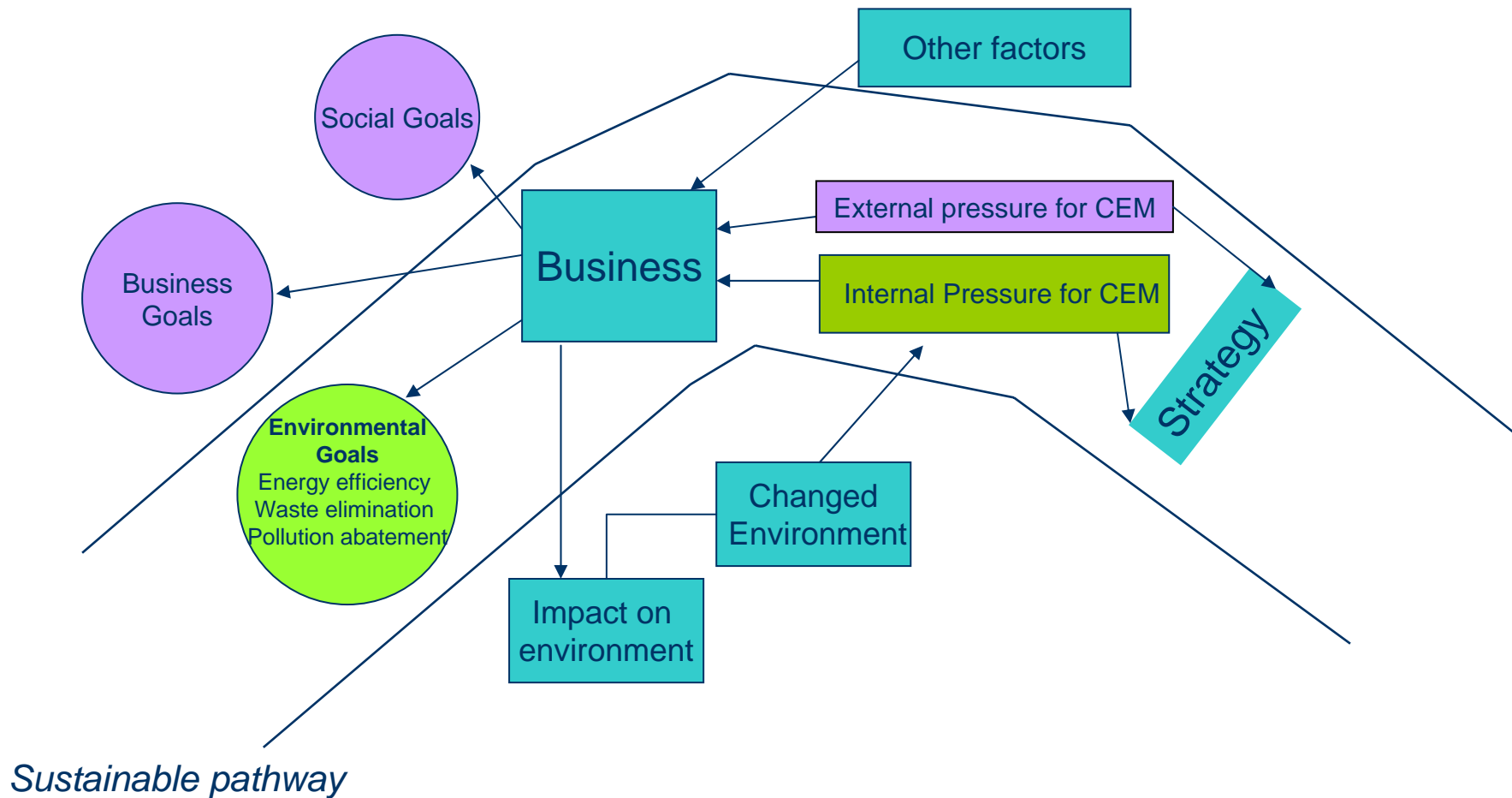


Thailand



China

# Business is an Important Actor in SD Process





## **II. When & Where KRC research is focused?**

# KRC Past & Present Research

- Business and the Environment (2001-2003)
  - environmental accounting: domestic
- Business for Sustainable Society (2004-2006)
  - local industrial system & business models: domestic
- Corporate Environmental Management (2007 - 2009)
  - pro-active policies & business strategies: Asia

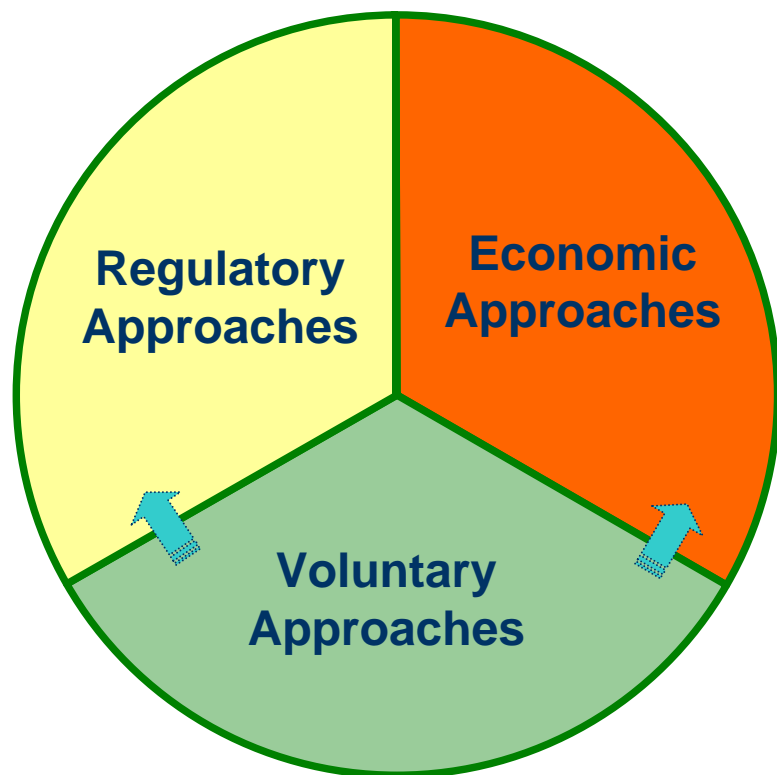
## In Asia...

- In industrialized countries like Japan, corporate environmental management originated as a institutional response to local pollution issues by complying regulations (reactive & passive response). Now, global environmental issues are of serious concern and various voluntary initiatives are taken which include CSR (Pro-active & active) response.
- Rapidly industrializing and developing Asia has also start responding by adopting cleaner technologies, pollution abatement strategies, environmental management systems & standards etc., but with difficulties and a lot of uncertainties.
- Asian Governments has strict rules and regulations. But dysfunctional circle of paper laws, poor regulatory capacity are widespread, resulting in non-compliance.
- A greater willingness prevails among different stakeholders to build an improved architecture where companies can exert responsibility to protect environment that goes beyond simple compliance.

# **III. What is Corporate Environmental Management?:**

## **Emerging concepts and a research outlook**

# Policy Approaches Influencing Corporate Behavior



- I. Traditional Regulatory
  - Costly & failures are common with weak enforcement.
- II. Economic based instruments (eg. Pollution charges).
  - Complemented I but not fully solved the problem with poor institutions.
- III. Voluntary approaches by B2B and B2C.
  - Less administrative cost
  - Complement regulations
  - Seek to enlist market forces
  - Involve different role for governments

# Project Goal: Definitions

The overall goal of this research is to examine the strengths and deficiencies of current corporate environmental management practices in developing Asia and to suggest a pro-active policy framework.

- **CEM** – as a voluntary commitment by business for positive environmental action that make them move beyond simple compliance.
- **Proactive policies** – Informal regulations and public-private partnerships that seek beneficial environmental actions through continuous improvement in business activities towards high energy efficiency, waste elimination and pollution abatement.

# Immediate Objectives of the Project

1. To outline the current status of innovative policy tools, public-private partnerships and market-based instruments.
2. To demonstrate, discuss and select pathways that could be implemented as strategies by companies of different sizes.
3. To summarize the advantages, outline the major challenges and design an enabling policy framework.
4. To motivate key decision makers to pursue the issue by establishing appropriate dialogue processes and share information on good practices.

# Business is not Homogenous

- (i) Large Corporate Houses
- (ii) Small and Medium Size Enterprises

employment, investment, production capacity, brand value, technology, profit margin varies dramatically.

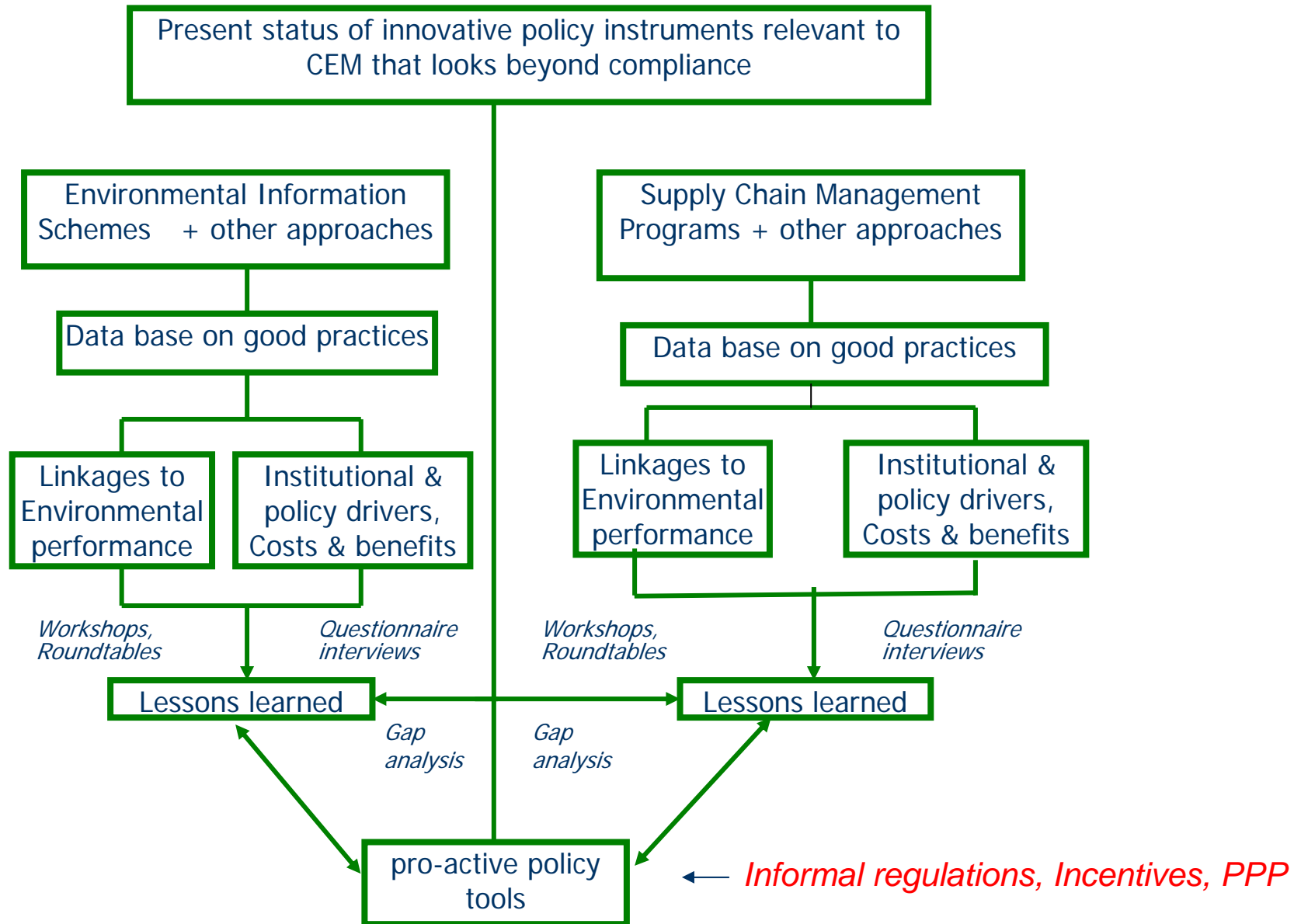
## SME

Japan: 4,690,000 (99.7% by total number)

China: 271,835 (state owned and non-state owned - above designated size)

India : 3,572,000 (33.7% share in exports)





# Environmental Information Disclosure

Information disclosure – increased provision of emission and pollution information by large sized companies to consumers, shareholders and community as well as regulators.

## Some Working Examples:

- **PROPER [Indonesia] (1995 ~)**
  - became the basis for facility level improvement.
  - lowered public cost in regulations.
- **Toxic Release Inventory Program [USA] (1998 ~)**
  - positively affected the stock market value.
  - reduced claims from environmental groups.
- **Carbon Disclosure Project [Global] (2000 ~)**
  - Increased confidence among investors.

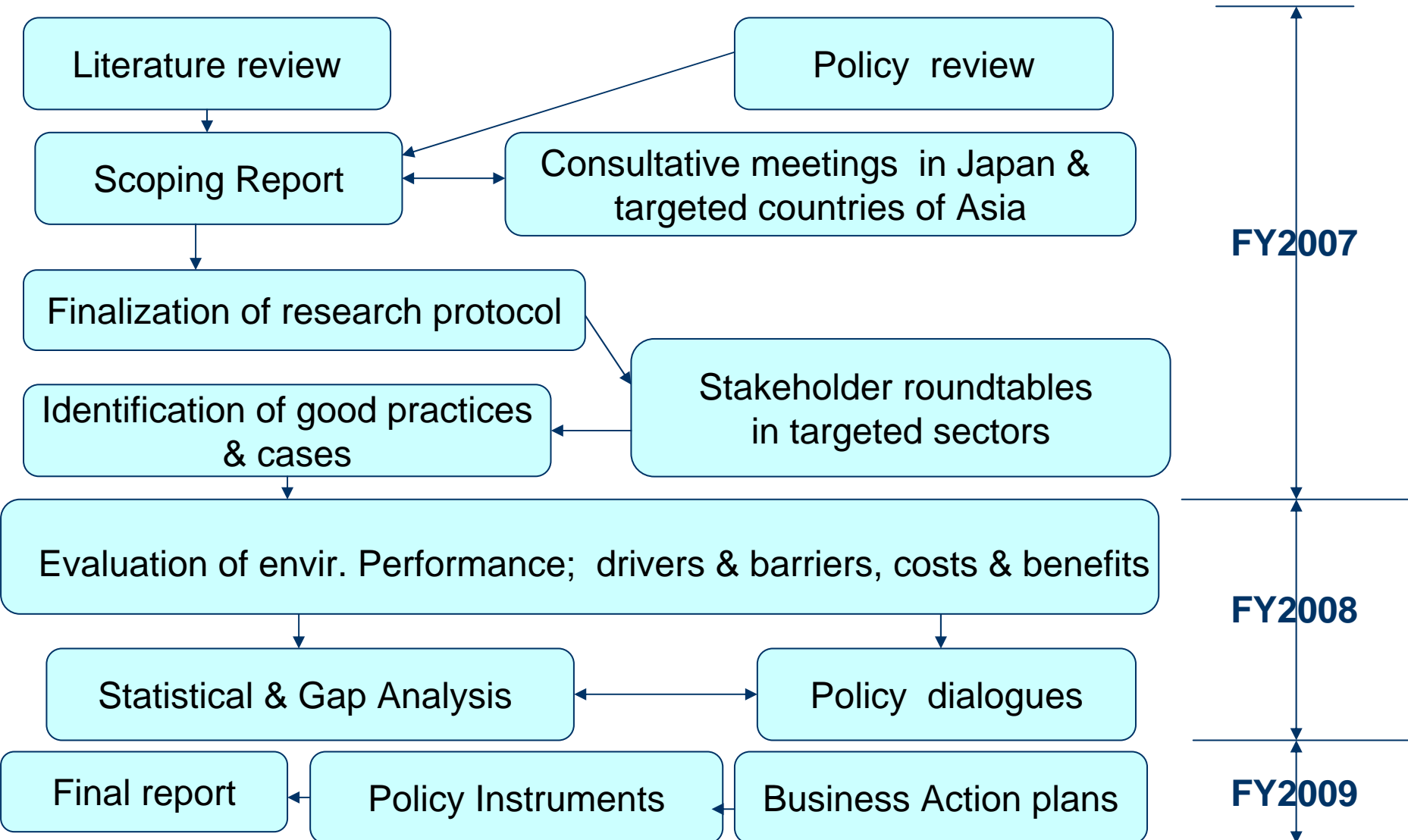
# Supply Chain Management

Mentoring the Small and Medium enterprises in the supply chain to establish best management practices as a way to improve their environmental performance.

## Some Working Examples

- **Toyota Motor Corporation [Japan]**
  - Environmental management system assistance to its domestic and overseas suppliers; improved eco-efficiency along the supply chain.
- **Starbucks Coffee [USA]**
  - Share information on organic coffee growing practices to global suppliers; premium price and market entry.
- **Ashok Leyland [India]**
  - provide direct technology assistance and training that focus on corrective actions at different tiers.

# Research Flow Chart



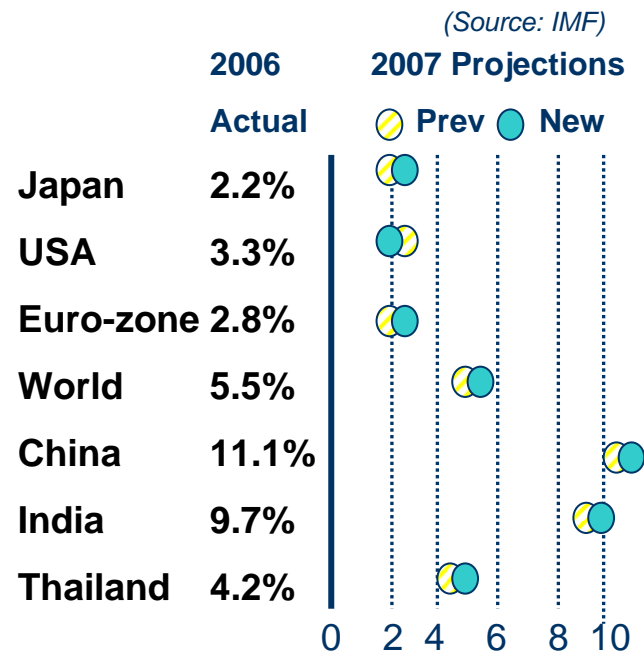
# Research Approach

- Desk reviews, international publications and records.
- Discussions at international meetings, symposia, seminars and workshops.
- Group discussion in national roundtables and business peer review meetings in target countries.
- Use of structured questionnaire, informal interviews and quantitative statistical analysis
- Pilot studies

# Target Countries for the study



## Economic Growth



## Environmental Performance

Japan	81.9
China	56.2
India	47.7
Thailand	66.8

(Source: yale)

## **IV. What are the objectives of this workshop?**

# Objectives of the Workshop

1. To enhance our understanding on the actual situation in target countries and the problems with corporate environmental management.
2. To identify other uncovered research issues as well as design an appropriate and optimal research protocol.
3. To inform and elicit other stakeholders' views, so that they can be addressed at an early stage.



# Objectives of the Workshop

1. To enhance our understanding on the actual situation in target countries and the problems with corporate environmental management.
  - Do developing Asia has a policy space to promote industrial transformation?
  - How the private sector deal with environmental problems in otherwise booming economies?
  - How those approaches are different from that of an advanced economy like Japan?

## Objectives of the Workshop

2. To identify other uncovered research issues as well as design an appropriate and optimal research protocol.
  - What shall be the key sectors and other relevant issues where further policy research shall be focused on?
  - How feasible such research methods as questionnaire surveys, roundtables etc?
  - what are the practical ways for collecting sensitive environmental performance data?

## Objectives of the Workshop

3. To inform and elicit other stakeholders' views, so that they can be addressed at an early stage

- What are the different types of CEM practices that exist in Kansai business that are appropriate to Asia-Pacific region?
- What are the wider interests of different stakeholders in this project and associated KRC activities in Kobe and abroad?

# KRC Research Team



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Thank You



Towards A Sustainable  
Asia-Pacific  
IGES 10th Anniversary



IGES Kansai