



## *GHG Emission Reduction Strategy of the Japanese Industry*



December 6,2000  
Dr.Tadashi Aoyagi  
Mitsubishi Research Institute Inc.

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## *Historical Review of Japanese Industry's Action*

- Research activities have started from the beginning of 1990s.
  - Utility companies took the initiative
- Global warming committee was founded in Keidanren
  - 1991 Keidanren Charter for Global Environment
  - 1996 Keidanren Appeal
- 1997 Keidanren Voluntary Action Plan
- Many activities took place after COP3
  - Automobile,chemical,steel,paper and pulp industries

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## *Example of Action by the Japanese Industry*

- Anticipating return as GHG credits
  - Investing in the World Bank PCF
- Anticipating new business opportunities
  - Investing in the EBRD ESCO fund
- Anticipating potential carbon credit
  - Afforestation business, biotechnology
- Establishing future trading markets
  - Forming an alliances with an US trader

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## *Support for Industry by Japanese Government*

- Feasibility studies for potential CDM/JI projects by NEDO
  - Energy conservation
  - Improvement of energy use
  - Detection of gas leakage in gas pipeline
- FS for potential CDM/JI projects by the Environment Agency
  - Afforestation
  - Forest management
- Task for the future
  - Those efforts ends at step of FS. Know-how for further negotiation with partners is needed

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## *Major interests towards COP6 from the Japanese Industry*

- Utility
  - Nuclear for CDM
- Pulp, and others
  - Sinks for CDM as full scale from the first commitment period
- Trading , financial services
  - Establishing the detailed rule of the Kyoto mechanisms

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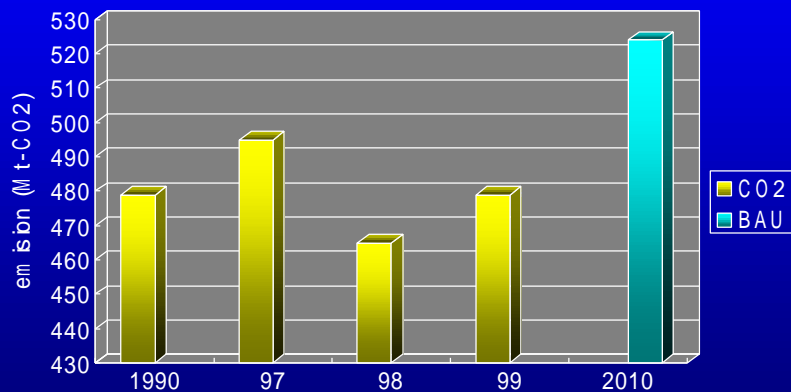
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## *Keidanren Voluntary Action*

- Commitments by industry group
  - Originally by 28 industry groups
  - In 1999, up to 34 industry groups
- Coverage of emission from Japanese industry is 77%
- Target :Maintain 1990 emission level at 2010
- Voluntary action begins at 1996, review process starts from 1997 on an yearly basis
- Results from 1999 review: 0.1% decrease from 1990 level

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## *Keidanren Review for CO2 Emission*



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## *Discussion Points for Voluntary Action*

- Concerns expressed against the Voluntary Action
  - Transparency of information
  - Same evaluation indices applied to all groups
- Accountability
  - Calculation method, condition for calculation
  - Basic assumption data
- Measures needed to increase credibility
  - Including other industry groups which have not participated in the Voluntary Action
  - Inclusion of managerial departments, transport energy consumption

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## *Basic Position of Japanese Industry*

- Kyoto mechanisms
- Environmental tax

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## *Reaction to the Kyoto mechanisms*

- Welcoming attitude towards the KM concept
  - Acknowledgement that KM brings the most economical reduction method
- Strongly opposition for emission caps set by the government
- No concrete proposal from industry for new design of reduction system using KM

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## *Reaction to Environmental Tax*

- Basically opposed to tax
  - Depending the status of each industry
- Reason for opposition
  - International competitiveness of manufacturing industries
  - Environmental Agency proposing some relief action should be considered ,but....

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## *Discussion points for Tax*

- GHG reduction by tax is uncertain
- Difficulty to change tax rate on an yearly basis as is done in northern European countries
- Moral hazards
  - Can companies emit unlimited GHGs as long as the tax is paid?
- Difficulty for ensuring revenue neutrality

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## *Framework of discussion by the Japanese government*

- Discussion has started from this October in high level commission in MITI,EA
- New reduction policy mix with tax,emissions trading, voluntary action
- Reference case; UK action plan from 2001

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## **Organisations, Trade Associations:**

- Association of Electricity Producers
- CBI
- Chemical Industries Association
- Combined Heat and Power Association
- Corporation of London
- Electricity Association
- UKOOA

## **Service Providers:**

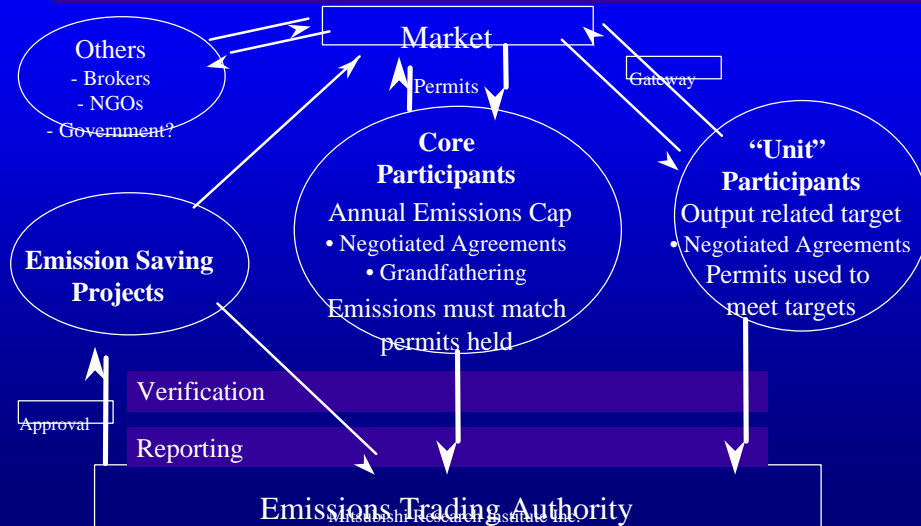
- EcoSecurities, ERM, ESD, IPE, Lloyds Register, Natsource, OM Group,

## **Government Departments:**

- DETR, DTI, HM Treasury

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## Outline of the Proposed UK Scheme



## Potential UK Market Value

Modelling assumptions:

Emission Permits in the Market = 18 MtC  
( 2MtC delivered by 10% reduction)

Trades : total permits, 3:2 ( SO<sub>2</sub> trading USA, 1988)  
⇒ 27 MtC trades

Plus 'unit' credits and project credits ≅ 3MtC

Total market = 30 MtC

Modelling price = £30.00/tC

Market value ⇒ **£900m**

but trading finds low cost abatement, price of permit likely to be lower

Government revenue?

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## *Status Quo of Japanese Industry*

*-MRI Comments-*

- Lack of experience on the use of market mechanism for environmental issues (reliance on command-and-control measures)
- Lack of negotiation ability for JI/CDM
- Not good at strategic thinking and action
- Insufficient international human network
  
- Without improvement on those points, Japanese industry may lose substantial business opportunities

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## *MRI Carbon Offset Initiative*

### • *Objectives*

- Find and evaluate commercially viable projects that result in emission reduction.
- Explore opportunities to expand businesses related to credit trading.
- Eventually set up a pilot system to assess, trade and verify credits from such projects through “learning-by-doing” process.

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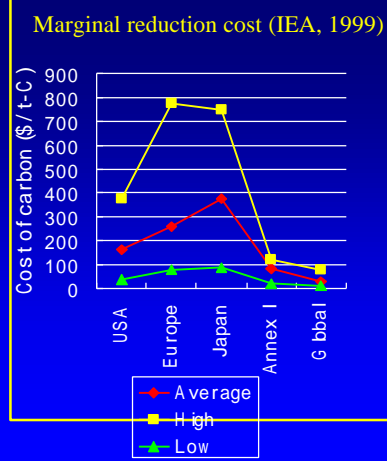
## MRI Carbon Offset Initiative

### • Rationale for launching the initiative

- Tough Kyoto targets necessitate to explore the possibility of emissions trading scheme in Japan
- Reluctance to “cap-and-trade”, as well as ample technological resources paves way for a “baseline-and-credit” approach
- Current deregulation and internationalization trends leads to new business opportunities
- Despite uncertainties, the importance of GHG trading will not diminish

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## Domestic reduction is costly...

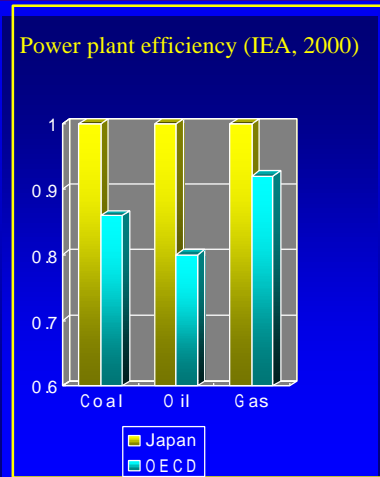


- Most researches have demonstrated that emission reduction in Japan is the most expensive in the world
- Domestic opportunities are limited, since efficiency is already high

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## *But look at the bright side*

- Advanced technology creates many transfer opportunities



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## *Outline of COI*

Project identification

Information and analysis

Analysis of business opportunities

☞ Pilot trading scheme

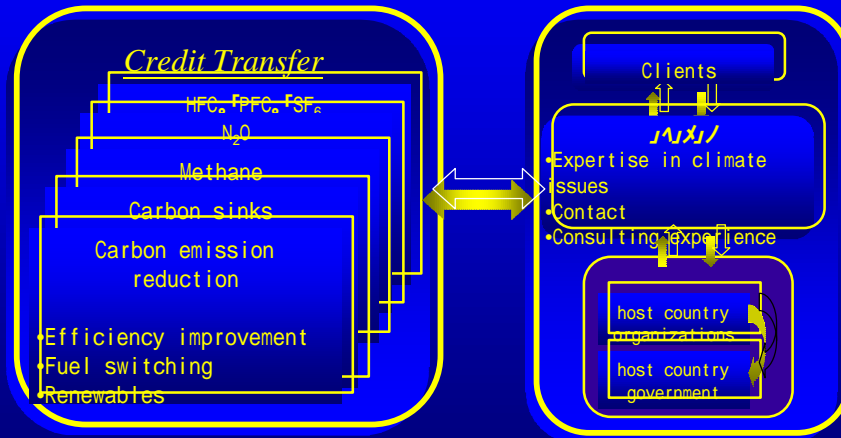
☞ In-depth feasibility study

☞ Implementation support

☞ Business development consulting

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## Project Identification:scheme



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## Project identification: status



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## *Pushing the initiative forward*

- Cooperation with the governments, which paves way for CDM/JI-specific projects
- Cooperation with private and public funding institutions
- Establishing a contract-based network in the host-countries

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## *Host country viewpoints*

- Greenhouse gas reduction is not the only priority for host country parties; overall objective is sustainable development
- CDM projects are different from conventional direct investment projects.
  - Respect of host country needs (technology, employment..)
  - Contribution to the host country economy
  - Local community support
  - Contribution to local environmental issues

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## *COI takes the necessary steps*

### 1. Establishment of dialogue

- With host country government, host and investor companies, locally active NGOs

### 2. Identification of opportunities

- Selection of projects that meet the requirements of each stakeholders.

### 3. In-depth feasibility studies

- To ensure commercial / environmental success, and to meet host country needs

### 4. Implementation

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