



***Japan's actions on
international technology
cooperation of ESTs***

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Outline

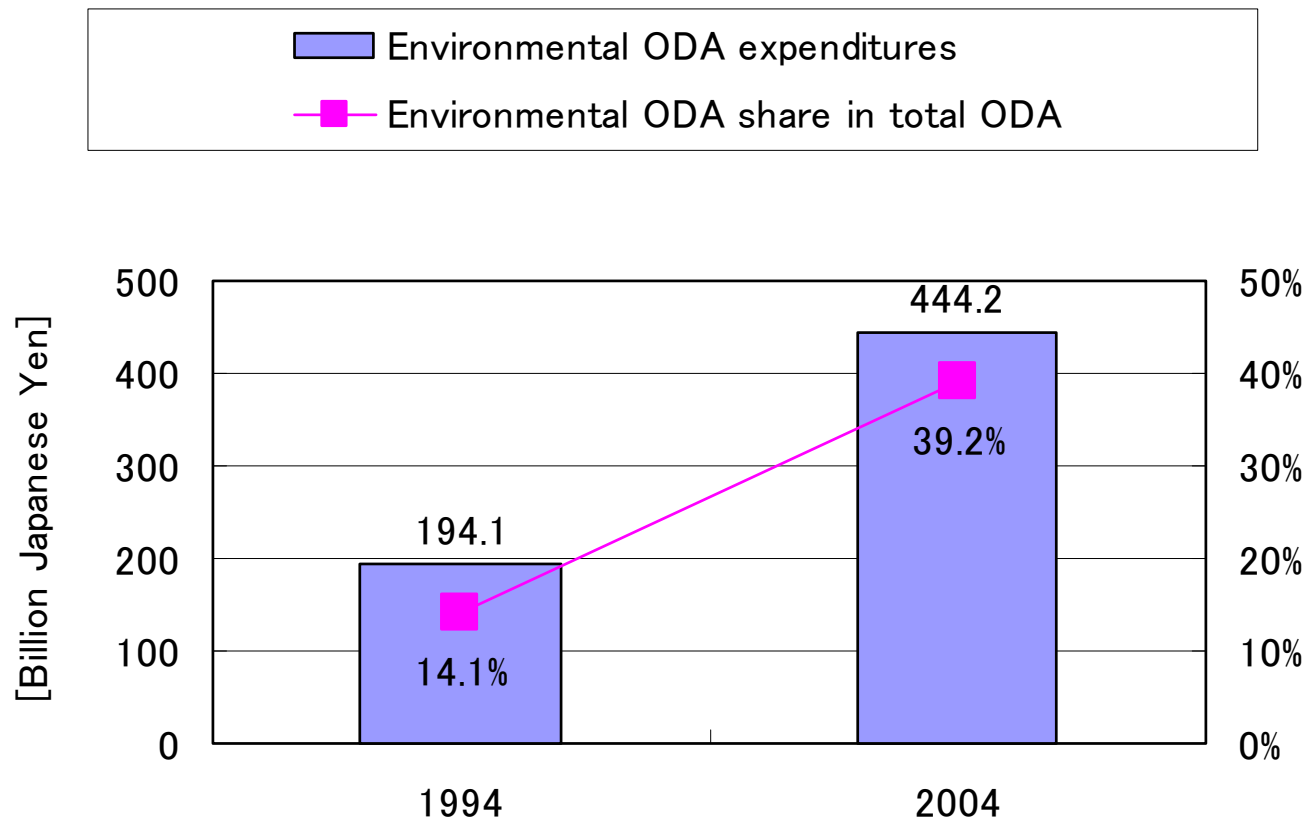
- **The importance of development and transfer of technologies**
- **Japan's action**
 - (1) Government
 - (2) Public-Private Initiative
 - (3) Private Sector
- **Conclusion**

The Importance of Development and Transfer of Environmentally Sound Technologies (ESTs)

- **Key questions:**
 - **For what?**
 - **Both for mitigating the effects of GHG emissions and for adapting to climate change**
 - **How can we do?**
 - **Both Hardware (facilities etc.) and Software (knowledge sharing, capacity buildings, etc.)**
 - **Who can promote?**
 - **Both UNFCCC and other forums (ex. APP, International development banks etc.)**
 - **Both Public and Private sector**

Government Action (1)

- **Environmental ODA (incl. Kyoto Initiative)**
 - **About 444 billion yen (Fiscal 2004) : US \$4.0 billion**



Source: Ministry of Foreign Affairs of Japan

Government Action (2)

- **Examples of ODA projects**
 - **Hard Ware**
 - **Wind power plant in Zafarana, Egypt**
 - About 13.5 billion yen (US \$123 million)
 - **Soft Ware (Capacity Building)**
 - **Turkish National Energy Conservation Project**
 - Dispatching experts and providing learning sessions
 - **CDM Center in China**
 - Helping China set up local CDM center



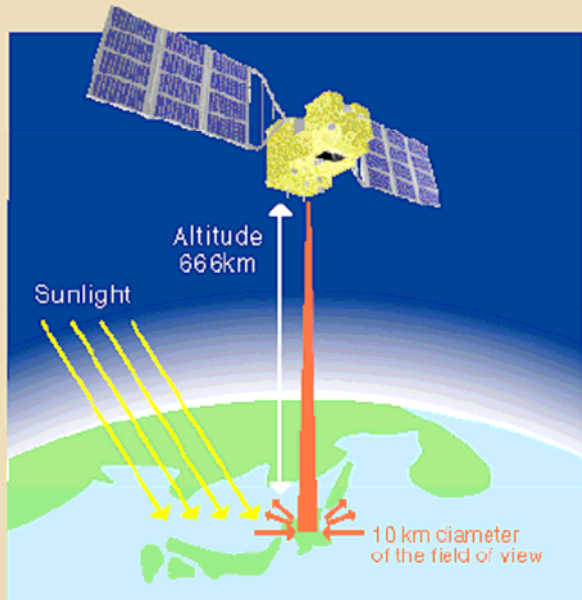
Source: Japan International Cooperation Agency (JICA)

Government Action (3)

- **Greenhouse Gases Observing Satellite (GOSAT) Project**
 - Measuring concentration of carbon dioxide and estimating carbon balance to accurately analyze the situation of global climate change

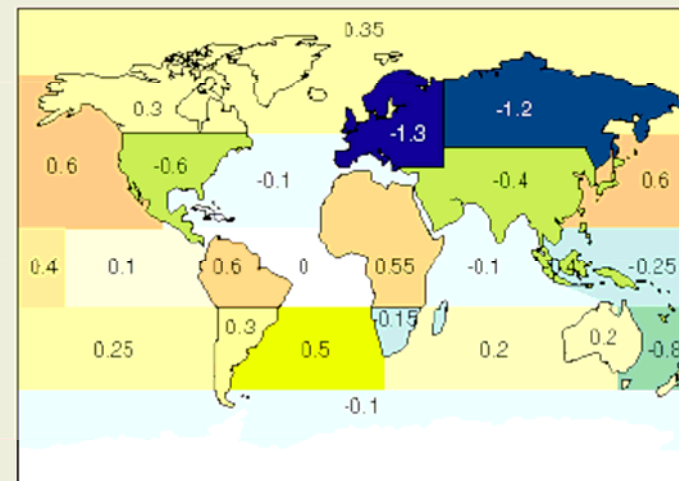
GOSAT (to be launched in FY 2008)

Measuring the concentration of CO₂



Estimated Carbon Balance

-1.5 0 1.5 (GtC/yr)



Public-Private Initiative (1)

- **Clean Development Mechanism (CDM)**
 - Popularizing Japan's advanced technologies for energy saving, alternative sources, etc through CDM projects
 - A total of 68 CDM and 4 JI projects, Total GHG reduction about 4,000 k-tons per year (as of October 24)
 - Ex. Rang Dong Oilfield Project (GHG reduction of 680 k-tons per year)



Source: <http://www.eneos.co.jp/>

Public-Private Initiative (2)

- **Asia-Pacific Partnership on Clean Development and Climate (APP)**
 - **Established in July, 2005**
 - **6 Partners: Australia, China, India, Japan, Korea, and US**
 - **Public-private partnership**
 - **Project-based activities focusing on energy technologies**
 - **Sectoral approach (cf. 8 Task Forces)**
 - **Complement to the Kyoto Protocol**

APP Task Forces:

- 1) Aluminum***
- 2) Buildings and Appliances***
- 3) Cement****
- 4) Cleaner fossil energy***
- 5) Coal mining***
- 6) Power generation and transmission***
- 7) Renewable energy and distributed generation***
- 8) Steel****

****Japan leads "Cement" and "Steel" as a chair country.***

Public-Private Initiative (3)

- **APP**

- **Recent event: 3rd Policy Implementation Committee (PIC)
Oct. 11-13, 2006 (@ Jeju island, Korea)**

- **Objectives**

- **Agree on the Action Plans introduced by 8 Taskforces.**
- **Discuss the procedures related to flagship project, monitoring and reporting, outreach and other relevant issues.**
- **Discuss the next steps for the partnership**

- **Outcomes**

- **Endorsed all the Action Plans in principle**
- **Experienced transition from the “Planning” to “Implementation” stage**
- **Recognized the importance of financing to the project activities**
- **Agreed on some procedures such as flagship and outreach**
- **Created stable foundations for the current and future APP activities**

- **All the Action Plans were released on Nov. 1st**

- **Now available on the APP website**

- **<http://www.asiapacificpartnership.org/>**

Private Sector (1)

- **Japanese Private Firms are actively working on many international cooperative projects**
 - **Waste Heat/Gas Utilization Technology**
 - **Coke Dry Quenching (CDQ) for Shoungang Group in China**



Source: Nippon Steel Corporation

Private Sector (2)

- **Small Wind Power Generator '*Soyokaze-Kun (Mr. Breeze)*' in India and Cambodia**
 - **Promoting small projects suitable for conditions in developing countries is very important**



Source: Shinko Electric Co. Ltd.

Conclusion

- **Japan has already done many actions by both the government and the private sector.**
- **The capacity of government for combating climate change is limited.**
 - The total amount of energy-investment needs will be \$16 trillion. (IEA, "World Energy Outlook 2003")
 - Governments cannot afford all the cost and further involvement of the private sector is "necessary".
- **Promoting small projects applicable for developing countries by using not only "innovative" but also "conventional" technologies is very important.**
- **Continuous efforts for R&D on ESTs by the private sector are important.**



***"Japan's actions on international
technology cooperation of ESTs"***

***Thank you very much
for your attention!***