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Sustaining Value: A Meeting on Finance and Sustainability

Global Warming and Financial Institutions

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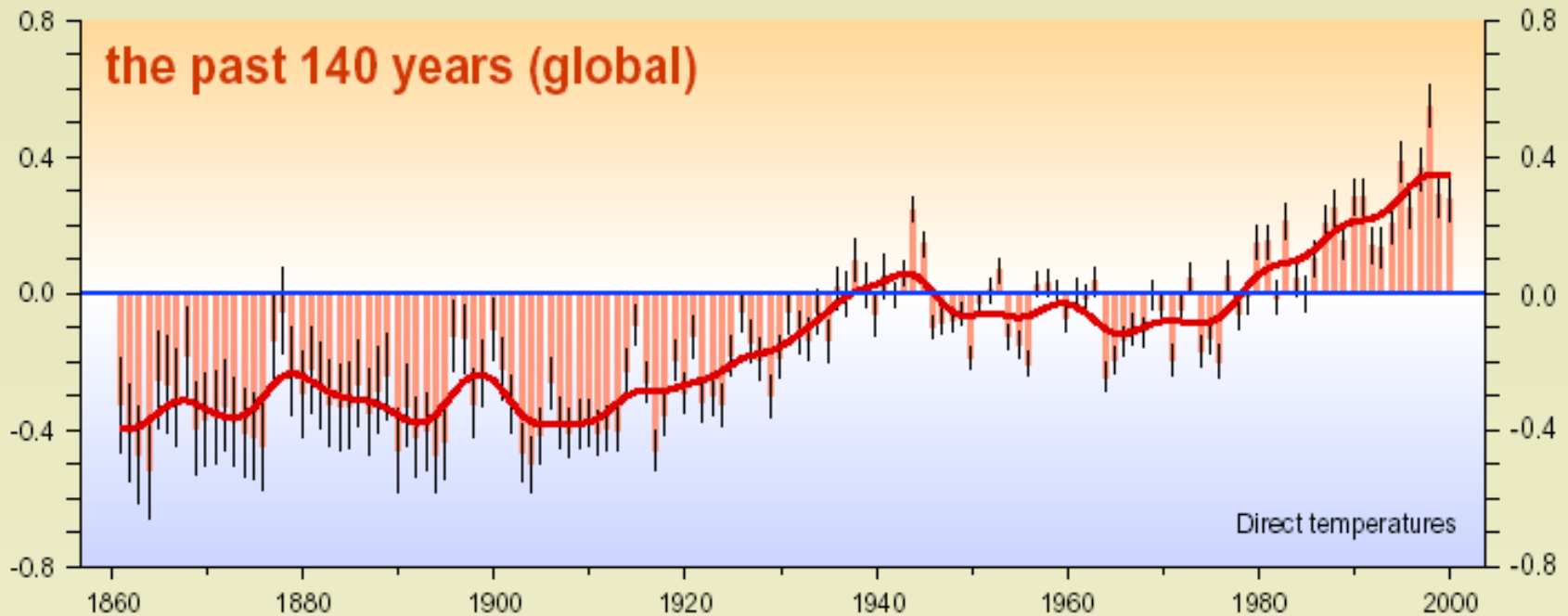
Global warming has already been observed

It is one of the most serious environmental problems and threatens human survival

Variations in the Earth's Surface Temperature

Source: IPCC, Third Assessment Report.

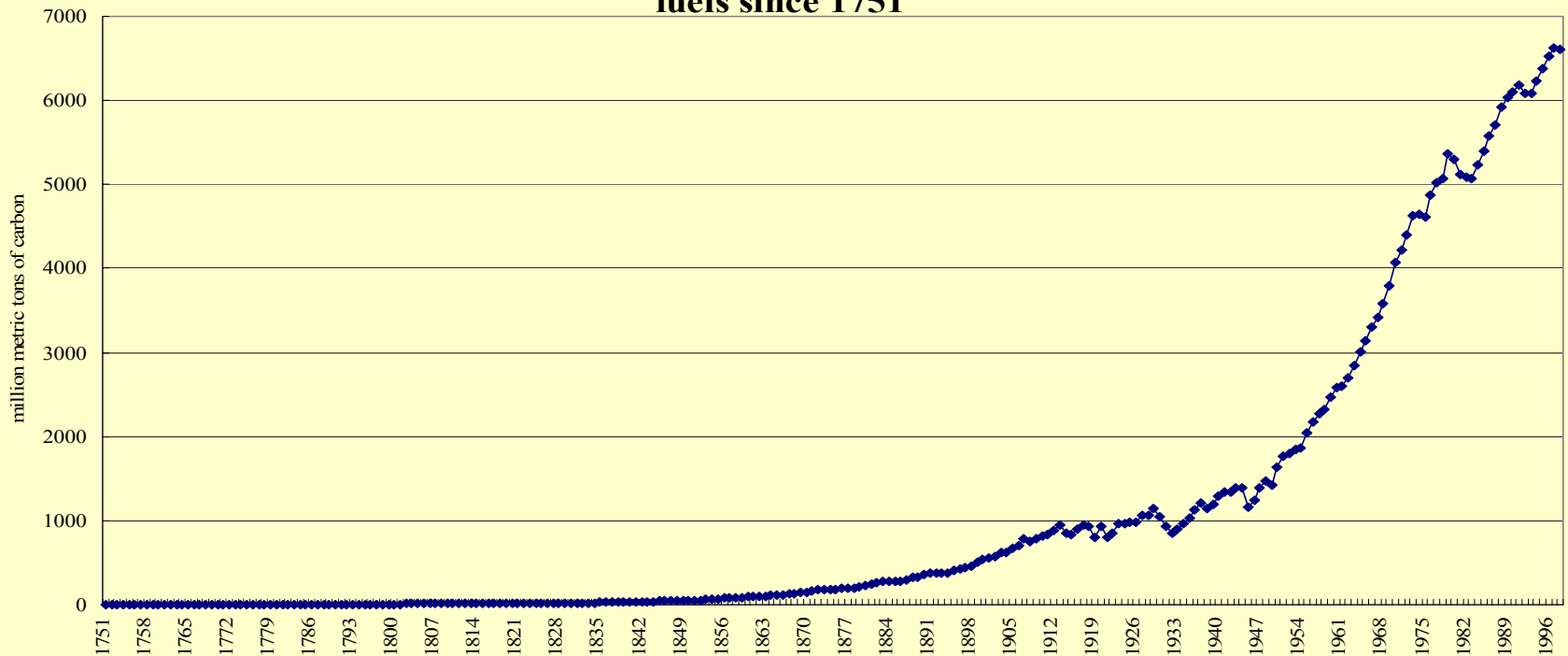
Departures in temperature in ° C (from the 1961-1990 average)



Global warming is caused by accumulation of GHG

Long-term measures more than decades are needed

Changes in the world's total CO₂ emissions caused by combustion of fossil fuels since 1751

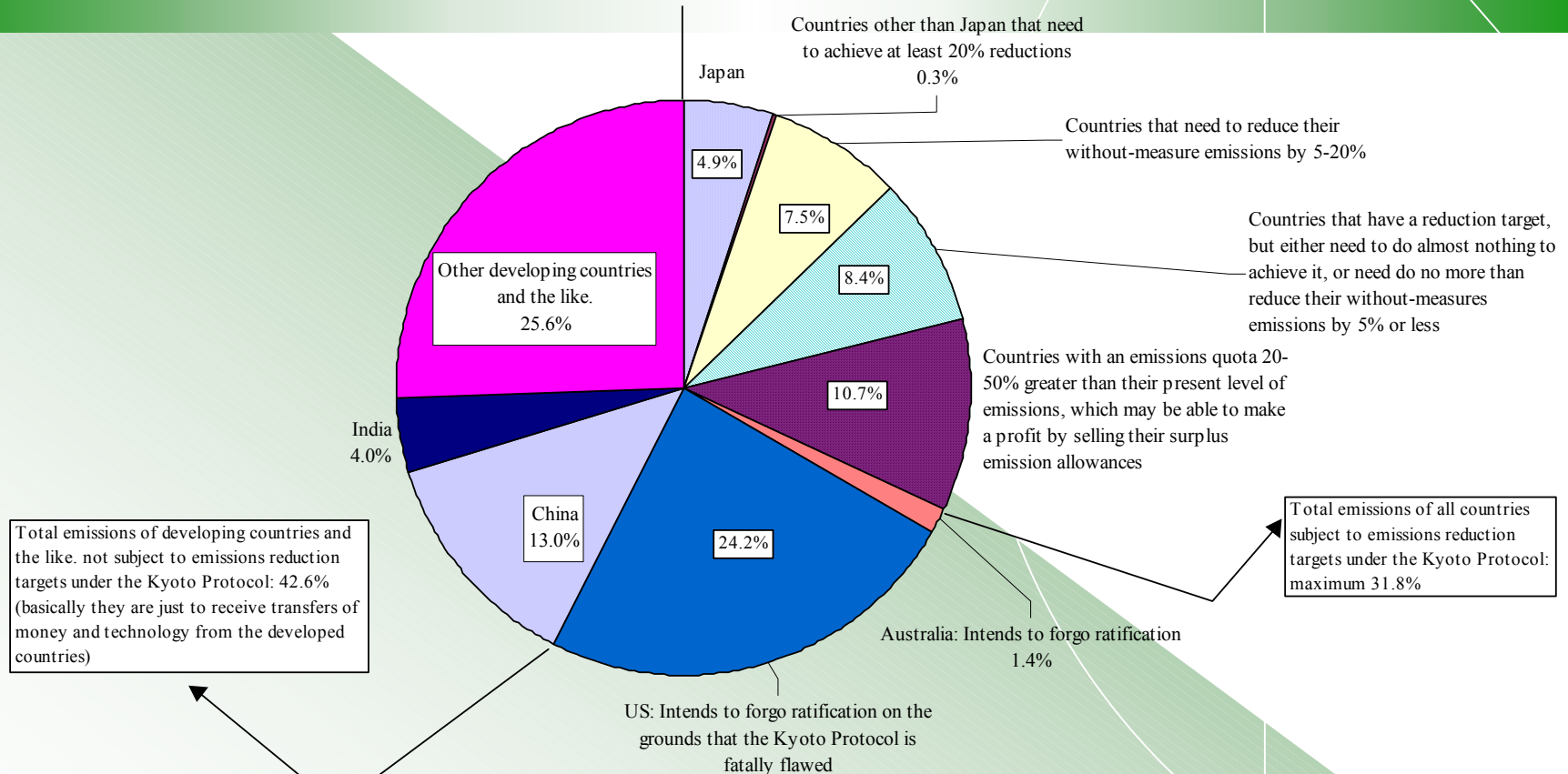


Sources: Gregg Marland, Tom Boden (Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, Oak Ridge, Tennessee, U.S.A.); Robert J. Andres (University of North Dakota, Grand Forks, North Dakota, U.S.A.); "Global CO₂ Emissions from Fossil-Fuel Burnings, Cement Manufacture and Gas Flaring: 1751-1998," July 25, 2001.

Note: Compiled by DBJ.

The Kyoto Protocol is the very first step

It covers at most a modest 30% of the world's total CO2 emissions flow

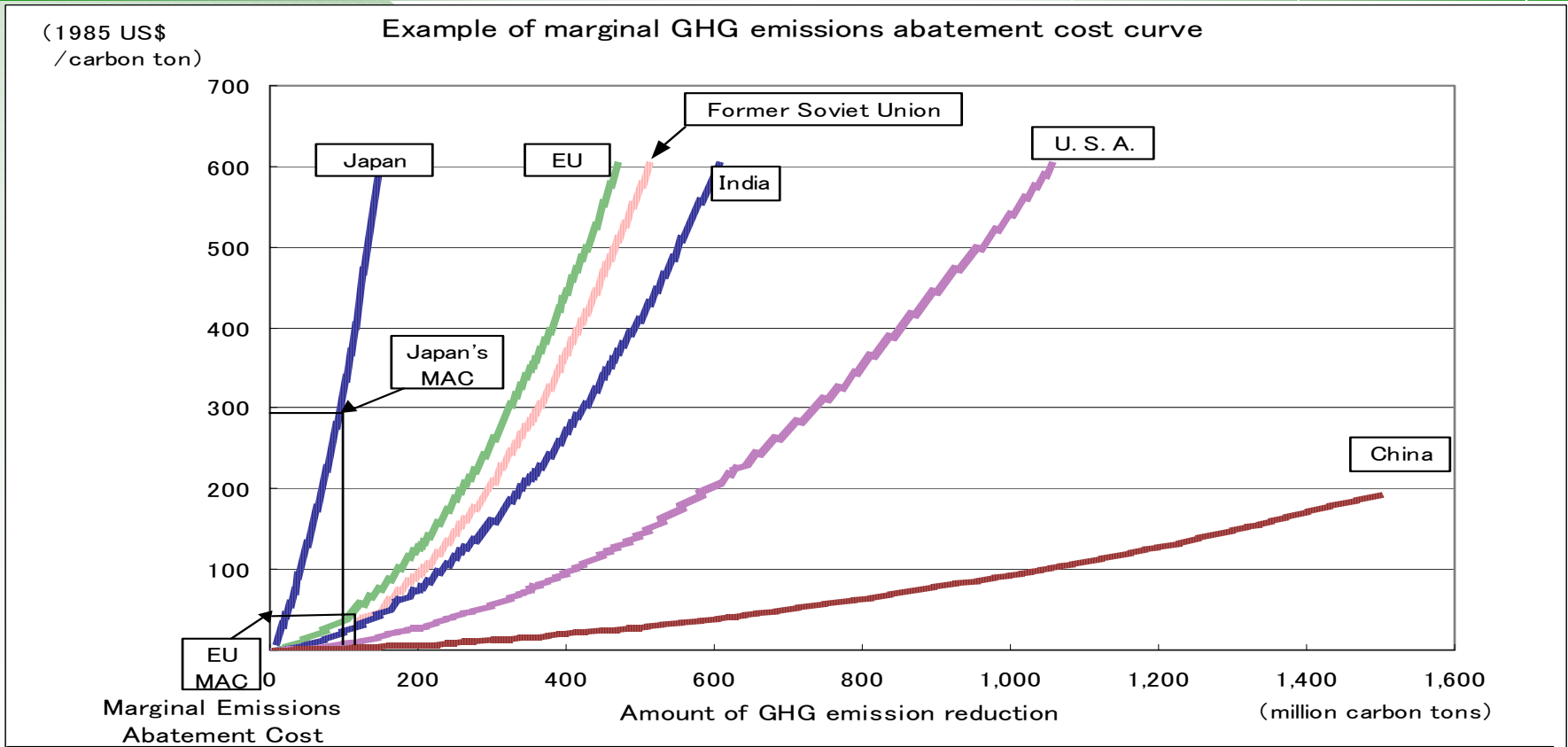


Sources. UNFCCC data; IEA figures on CO₂ emissions for 2000; Aiba and Saijo, *The Kyoto Protocol and Global Environmental Strategies of the EU, the U.S. and Japan*.

Notes. The figures do not add up to 100%, due to rounding of fractions. Compiled by DBJ.

The Kyoto mechanism minimizes the worldwide costs of combating global warming

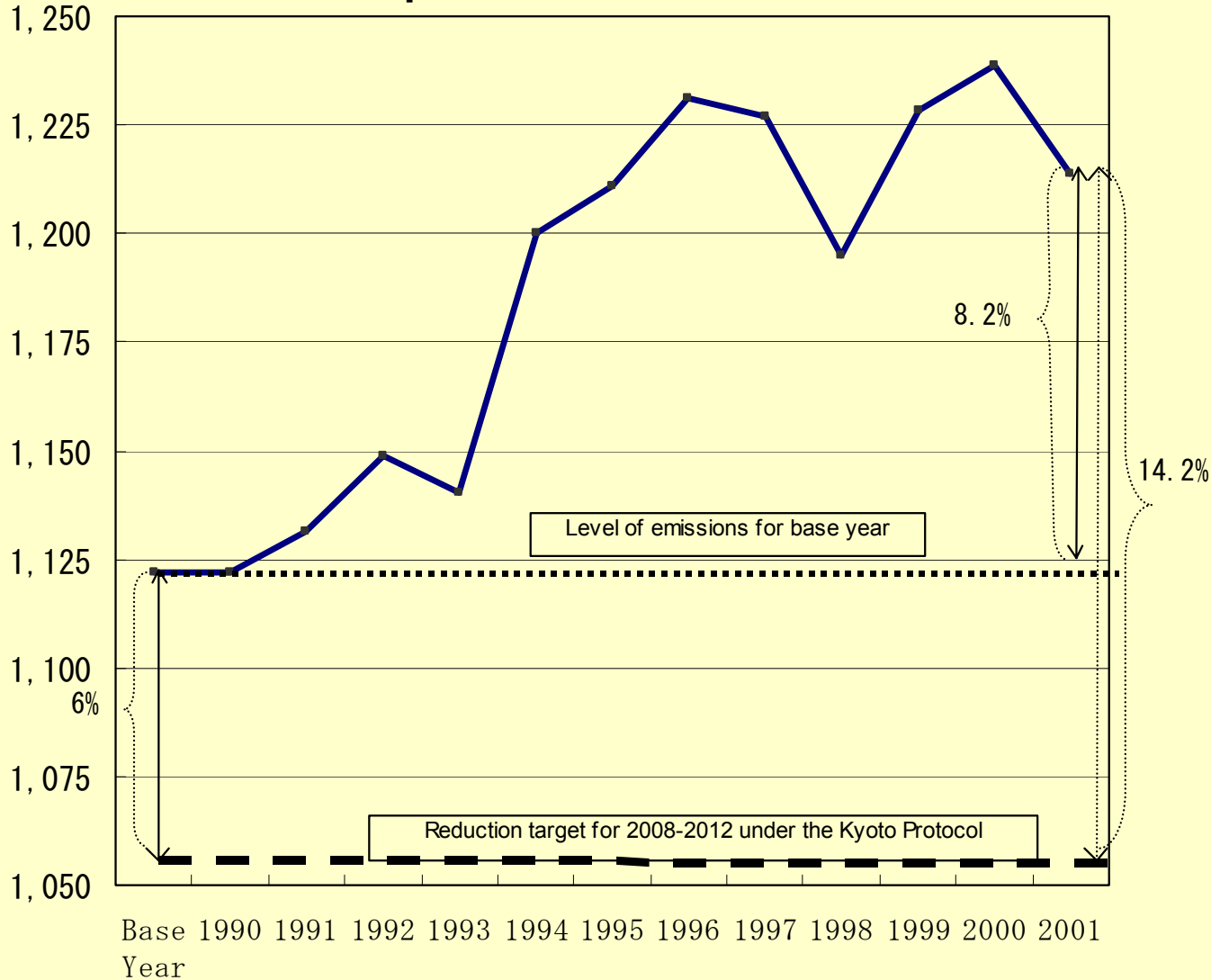
Great potential of the Clean Development Mechanism (CDM)



Source: A.D. Ellerman, H. Jacoby, and A. Decaux, 1998, "The Effects on Developing Countries of the Kyoto Protocol and CO2 Emissions Trading", MIT Joint Program Report No.41.
 Note: Compiled by DBJ.

(mil. t CO₂)

Japan's CO₂ Emissions



Source. Japanese government.

Notes.

1. As of FY 2001, Japan's CO₂ emissions (its GHG emission) stood at 8.2% above the 1990 level, despite the slump in the economy. Total emissions of the six types of GHG were up 5.2%.

2. Although emissions decreased drastically in FY 2001 from the previous year due to the unusually cool summer and warm winter besides stagnation of economic activities, the trend remains upward, and the latest estimate by the Ministry of the Environment projects emissions will be up 14% in 2010. It could further increase, depending on nuclear power plant construction or economic trend.

3. In terms of individual sectors, emissions were down 5.1% in the industrial sector, up 22.8% in the transportation sector, up 30.9% in other industries, and up 19.4% in households.

4. Japan is already more than 14% above its Kyoto reduction target of 94% of the baseline.

5. Japan can claim a maximum deduction of 3.9% due to absorption by forest management.

6. Compiled by DBJ.

Conclusion

- ◆ Global warming is an issue that needs to be addressed over the long term, and actions by financial institutions are crucial.
- ◆ The Kyoto Protocol is the first step towards combating global warming and should be utilized effectively.
- ◆ The Kyoto mechanism, based on CER/ERU transactions, minimizes the worldwide costs of combating global warming; there is especially great potential for the Clean Development Mechanism (CDM).
- ◆ Initiatives of financial institutions are crucial to solving environmental problems that require huge costs, long time spans, and cross-border measures.