

Speech Theme: Energy Reduction Efforts at Offices and Homes in Japan

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Thank you for that introduction. It's an honor to speak again at this prestigious forum. Next year marks the start of the first commitment period for the reduction of greenhouse gases stipulated in the Kyoto Protocol, which went into effect in March 2005.

Today, I would like to talk about the status of activities in Japan targeting controls on energy consumption, particularly in offices and homes, where such reductions are seen as being especially difficult.

Appendix 1 in my distributed materials shows examples of climate changes occurring here. The graph shows the total number of days in which the temperature exceeded 35 degrees Celsius, or 95 degrees Fahrenheit, during ten-year periods over the past forty years in Kyoto, Osaka, and Tokyo. The temperatures have clearly been increasing in all three regions. Summers in Kyoto have been particularly hot and this August, temperatures reached 38.6 degrees Celsius approaching the record of 39.8 degrees Celsius for that city. Urban development contributes to these increases in maximum temperatures. But these numbers are a clear indication that global warming is progressing.

One of the major news items this year on global warming came out of the 33rd G8 Summit, held in June in Heiligendamm, Germany.

Actions related to global warming were declared to be critical issues. In February, the Intergovernmental Panel on Climate Change, or IPCC, presented the threat of climate change and related measures. The increased performance of a supercomputer enabled far more extensive climate model simulations than in the past. So their report received high acclaim for the improved accuracy of predictions. And the Japan Aerospace Exploration Agency is developing a Greenhouse Gas Observing SATellite, called GOSAT, to enable highly accurate measurements of CO₂ concentrations from space. This satellite will be launched sometime in 2008.

The 19th Asia-Pacific Economic Cooperation meeting was held in Sydney, Australia, at the beginning of September.

APEC leaders announced an action agenda targeting climate change, energy

security, and clean development. The agenda included improving energy efficiency by at least 25 percent in 2030 compared with that of 2005, increasing forest coverage in the APEC region, and establishing an Asia-Pacific Network for Energy Technology, called APNet, to promote low-emission technologies and other technological innovations.

In April 2005, Japan's Cabinet approved a plan to achieve the Kyoto Protocol target of reducing total greenhouse gas emissions by 6% in 2010 compared with the 1990 figure, which is the baseline year for the Protocol.

The industrial sector has also been making efforts to achieve such goals. In June 1997, the Japan Federation of Economic Organizations, or "Keidanren," announced a voluntary action plan with the participation of companies not only in the manufacturing and energy industries, but in a total of 36 industries, including distribution, transportation, and finance. Keidanren is promoting measures to bring CO₂ emissions caused by energy consumption down to below the level of 1990 by 2010.

This August, the Industrial Structure Council and the Central Environment Council jointly presented an interim report outlining projections for greenhouse gas emissions in 2010. The table in Appendix 2 is a summary of these projections.

In the "Measures effect maximum" scenario, which assumes that current measures are implemented with maximum efficiency, total greenhouse emissions are expected to increase by 0.9%. In the "Measures effect minimum" scenario, total greenhouse emissions are expected to increase by 2.1%. This means that in either case, the targeted reduction of 0.6% will not be achieved. Even in the "Measures effect maximum" scenario, reductions fall short by about 20 million tons of CO₂.

One of the main areas where sufficient reductions are not achieved is the consumer sector, which is comprised mainly of the commercial and residential segments indicated by the yellow boxes in the table.

Appendix 3 has a breakdown of energy-consumption volumes for various uses in the commercial sector in 2005. Electricity in general and lighting, room heating, and cooling account for 75% of the total. So a critical issue for commercial facilities is reducing energy consumption while maintaining service quality.

Appendix 4 shows energy consumption for various uses in Japanese homes.

Energy for room heating and water heating accounts for 57% of the total and must be reduced.

Replacing refrigerators, air conditioners, TVs, and other appliances with better energy-saving models like those in Appendix 5 will contribute to a significant reduction in CO₂.

In December 2004, in my capacity as chairman of the Committee on Global Environment and Energy Policy at the Japan Association of Corporate Executives, or KEIZAI DOYUKAI, we announced “Eight Proposals Aimed at Overcoming Global Warming.”

Calculations for some of those proposals suggested that CO₂ emissions could be reduced by 34 million tons through the creation of an ICT society, where ICT will contribute to reducing CO₂ by changing the societal structure with the increased efficiency of overall supply chain management and work styles such as tele-working.

For these measures to be successful, it is important to increase awareness among the Japanese. Reforms in lifestyles and business styles are essential.

So it is now necessary to regularly promote various types of energy-conserving lifestyles by strengthening education and communication to change the thinking of consumers so that they understand that continuing to use old, inefficient devices wastes energy.

Today, I have talked about only a small part of the energy conservation measures in Japan. There is no miracle cure for the immense problem of global warming.

In closing, I would like to stress that science and technology will play a major role in helping humankind solve global warming and protect the overall environment while achieving economic growth.

Thank you.