Panel Presentation

Japan's Efforts to Achieve Kyoto Protocol Goals

(Summary: Translated by Secretariat)

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The most representative and effective effort which has been taken since the Kyoto meeting is the "T op Runner" method, introduction of an energy-saving standard. With tax preference to energy-efficient automobiles, automobile industry achieved the Automobile Fuel Efficiency Target well before the target year 2010. Although Japan's business community has made significant progress voluntarily, the total GHG emissions are increasing. Since the Kyoto Protocol came into effect in 2005, Japan's government has been intensifying action plan. However we have yet no consensus on adopting carbon tax and domestic emissions trading system.

On GHG emission transition, the industrial sector has declined by 5%. The transportation sector seems stable or on slightly declining trend in recent years. On the other hand, the emissions from the commercial and other sector have increased by more than 40%, and the residential sector by more than 30%, which is main factor that make CO_2 reduction target hard to achieve.

The joint council of the Ministry of the Environment and the Ministry of Economy, Trade and Industry reviewed current efforts plan and its implementations toward GHG reduction target. With 7.8% of increase by 2005, almost 14% of reduction must be implemented to achieve 6% reduction. However, with increase in forestry absorption and international CDM projects, the domestic reduction target is actually 0.6% from the base year.

Even if all of the countermeasures go well, around 20 million tons of CO₂ will remain to be reduced. When countermeasures do not go well, it will be around 34 million tons. Joint committee has discussed how to bridge the gap, and published an interim report in December 2007. After reviewing public comment, the final report was submitted on February 8, 2008.

In current countermeasures, the Federation of Electric Power Companies of Japan announced the plan to reduce CO₂ emission intensity by 20% by 2010, which lead to about 66 to 68 million tons of CO₂ reduction.

Against remained gap, additional 19 million tons should be reduced by industry sectoral efforts. Some improvements by revision of the Rationalization in Energy Use Law will reduce CO₂by 3 million tons. Also, by strengthening energy-saving in housing and building, through preferential tax treatment, 2 million tons of CO₂ reductions will be achieved. Applying Top Runner program widely, promoting energy-efficient

automobile etc. will reduce 4.8 million tons of CO_2 . With other measures, 37 million tons of CO_2 reductions in total will be achieved.

If above countermeasures are taken successfully, we will reduce more than the expected 34 million tons of CO₂ gap and achieve the target. In reality, however, those countermeasures are hard to implement. Also, because this achievement plan assumes forestry absorption and overseas CDM project, the reduction will not be achieved easily.

(Questions and answers with the coordinator)

Q: Please show us concrete examples of renewable energy promotions.



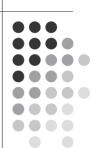
A: One is Renewable Portfolio Standard (RPS) in which electric power suppliers must generate appropriate amount of electricity from renewable energy. Another is buying electricity from renewable energy. RPS target has been gradually raised, and buying price has been increasing. Some companies also started to buy Green Electricity Certificate voluntarily. Preferential tax treatment against bio-fuel promotion as well as its R&D is under consideration.

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February 14th, 2008 Prof. Hironori HAMANAKA Chair, IGES Board of Directors



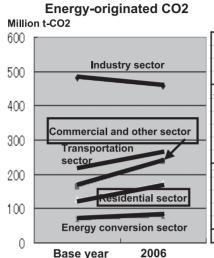
Efforts to Implement the Protocol in Japan



- Ongoing Japan's Global Warming Countermeasures
 - Energy-saving standard (top runner program): Improve corporate R&D
 - Making fuel-efficient automobile common:top runner standard green tax plan
 - Keidanren Voluntary Action Plan: It almost achieved stability in total
- Kyoto Protocol Target Achievement Plan (2005)
 - Voluntary Action Plan: Expand target industries, raise target level, enhance transparency, reliability and likelihood of achieving targets
 - Strengthen energy-saving strategy for building and housing
 - Systems for calculation, reporting and public disclosure of greenhouse gas emissions, cooperative energy-saving countermeasure among multiple actors
 - Voluntary participation in domestic emissions trading
 - However there is no consensus on environment tax or domestic emissions trading system

Transitions of GHGs Emissions of our Country (to 2005)



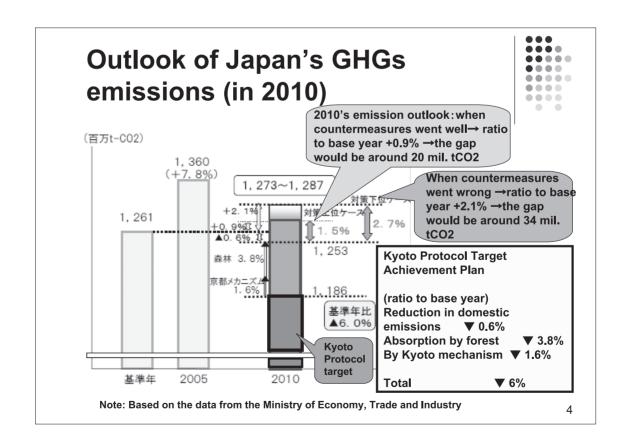


Base year

All gas

			実 績	
	ガス及び部門の区分	京都議定書	2006年度	基準年度
		基準年度	速報値	比増減率
	(単位)	(百万tCO2)		(%)
エキ	ネルギー起源CO2	1,059	1,184	11.8
	産業部門	482	455	<u>-5</u> .6
	民生(業務その他部門)	164	233	41.7
	民生(家庭部門)	127	166	30.4
	運輸部門	217	254	17
	エネルギー転換部門	68	76	11.3
₹0	D他	202	157	
	非エネルギー起源CO2	85	91	7.1
	メタン	33	24	-28.7
	一酸化二窒素	33	25	-22
	代替フロン等3ガス	51	17	-66.2
総排出量		1,261	1,341	6.4

Note: Based on the data from 「京都議定書目標達成計画の評価・見直しに関する中間報告(案)」 August 2007, Global Environmental Committee Central Environmental Council, and **Environment Committee, Industrial Structure Council**



Assessments and renovations of Kyoto Protocol Target Achievement Plan



- Interim Report by the Central Environmental Council and the Industrial Structure Council in Dec. 2007
 - Implementation of Countermeasure against current target

Power sold by electric power suppliers

- At present, basic unit for CO2 emissions is 0.423kg-CO2/kW (2005), which has not changed much since the base year.
- •Environmental Action Plan of The Federation of Electric Power Companies of Japan:Reduce CO2 emissions intensity by approximately 20% from the base year level, to about 0.34kg-CO2/kWh.
- If above targets are achieved, about 66-68 million t-CO2 (equivalent to 5.2-5.4% in comparison with the base year's total emissions) will be reduced
 - Focus on radical reinforcement of countermeasures in commercial and residential sector

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Assessments and Renovations of Kyoto Protocol Target Achievement Plan (Continued)



- Major added countermeasures (Final report by the Central Environmental Council and the Industrial Structure Council)
 - Voluntary action plan: raise target and strengthen the measures.
 Set numeral target and urge the industries which have not planned yet.
 - [approx. 19 million t-CO2 reduction]
 - Adopt Energy control regulation per corporation
 Objective assessment of energy-saving measures with benchmark, enhancement of Basic Unit for Energy [approx. 3 million t-CO2 reduction]
 - Strengthen energy saving measures in housing and building [approx. 2 million t-CO2 reduction]
 - Strengthen energy-saving in housing and building, expand the scope of compulsory reporting
 - Preferential tax treatment against energy saving reform

Assessments and Renovations of Kyoto Protocol Target Achievement Plan (Continued)



- Major added countermeasures (continued)
 - Expand object products of top runner program [approx. 1.3 million t-CO2 reduction]
 - Expand object into business purpose electrics (incl. complex machine and industrial refrigerators)
 - Set new target to the products which have achieved the target in time
 - Raise energy-efficiency of automobile [approx. 3.5 million t-CO2 reduction]
 - Civic action such as 1 kgCO2/person/day [approx. 1 million t-CO2 reduction]
 - Adopt economic incentive such as eco-point, promote energy saving home electronics and spread carbon offset
 - Support SMEs and explore domestic CDM for SMEs [approx. 1.7 million t-CO2 reduction]
 - Promote use of new energy [approx. 1.3 million t-CO2s reduction]
 - Encourage voluntary efforts such as Green Electricity Certificate
 - · Promote biofuels