

## Gist of the Kyoto Protocol Target Achievement Plan

In line with the Climate Change Policy Law, the Kyoto Protocol Target Achievement Plan was stipulated to set forth necessary measures required to ensure the accomplishment of the 6% reduction commitment under the Kyoto Protocol. The Plan was formulated as an outcome of the evaluation/review of the Climate Change Policy Programme conducted in FY 2004.

### 1. What is aiming at Climate Change Policy

- Ensure 6% reduction commitment under the Kyoto Protocol
- Steady implementation of a continuous as well as long-term GHG emissions reduction on a global scale.

### 2. Basic Idea

#### ○ Simultaneous pursuit of environment and economy

Ensure the activation of Japan's economy and creation of employment be achieved by the efforts for accomplishing 6% reduction target under the Kyoto Protocol. In this respect, Japan will make efforts in preparation and development of a system which will contribute to the simultaneous pursuit of the environment and economy utilizing technological innovation and our ingenuity.

#### ○ Promotion of technological innovation

Accelerate technological innovation including energy saving and utilization of unused energy as well as facilitating efficient apparatus and state of the art system. Establish an advanced state founded on the principles of environmental protection.

#### ○ Promotion of participation and collaboration by all the stakeholders (Public awareness raising campaign, information gathering)

Proactively provide and share the information on progress of measures, specific actions that require more efforts. In addition to this, facilitate information dissemination activities to accelerate the participation and collaboration by all the stakeholders such as central and local governments, business entities and citizens.

#### ○ Utilization of various policy measures

Effectively utilize various policy measures including voluntary, restrictive, and economic as well as information measures, taking advantage of their feature.

○Prioritization of the evaluation and review process

Comprehensively assess the progress of policy measures and emissions levels in FY2007 and implement necessary policy measures starting from FY2008. Also, strengthen policy measures as appropriate after checking progress of policy measures taken by the government.

○Ensuring international collaboration

Make utmost efforts in establishing common rules which will be participated by all the nations including the United States and developing countries. Also, Japan will take initiative in the actions taken by other countries through international cooperation.

### 3. Target of emissions reduction and absorption of greenhouse gases (GHGs)

GHGs	Target		Projected reduction in FY 2010 under existing measures (+12%) Total reduction with projected increase caused by economic growth and reduction by existing measures over actual achievement in FY2002 (+13.6%)
	Emissions in FY 2010 (million tons-CO <sub>2</sub> )	Compared to FY1990 (Total emission over the base year)	
①Energy related CO <sub>2</sub>	1,056	+0.6%	-4.8%
②CO <sub>2</sub> from non-energy sources	70	-0.3%	-0.4%
③Methane	20	-0.4%	
④N <sub>2</sub> O	34	-0.5%	
⑤Other greenhouse gases	51	+0.1%	-1.3%
Sink including forests	-48	-3.9%	-3.9%
Kyoto Mechanism	-20	-1.6%*	-1.6%*
<b>Total</b>	<b>1,163</b>	<b>-6.0%</b>	<b>-1.2%</b>

\*Difference between reduction target during the first commitment period stipulated in the Kyoto Protocol and the actual value (emission level after the amount of GHG absorption is subtracted) during the same period is to be addressed by the Kyoto Mechanism. (Based on the projection of emission levels of each GHG with the effectiveness by existing measures, the difference is expected to be 1.6%)

(Indicated reduction target of energy related CO<sub>2</sub> in FY 2010 by sector )

	Emissions (million tons-CO <sub>2</sub> )	Projected reduction in FY 2010 under existing measures (million tons-CO <sub>2</sub> )
Energy related CO <sub>2</sub>	1,056	-59
Industrial sector	435	-15
Private sector	302	-31
Business sector	165	-13
Household	137	-18
Transportation sector	250	-9
Energy conversion sector	69	-4

\*Projected level by existing measures achieving tangible results, accomplishing projected economic growth.

#### 4. Policy measures to accomplish the target

##### (1) Policies and measures on GHGs emissions reduction and sinks

###### ① Energy related CO<sub>2</sub>

In order to reduce energy related CO<sub>2</sub>, which consists 90% of total GHG emissions, Japan will continuously promote measures on energy related apparatus as well as on individual facility/stakeholder. We will also take measures to shift socio-economy including urban/regional structure and public transportation infrastructure into low carbon one to shift Japan's energy demand and supply into low carbon type.

Table Outline of Reduction Measures of Energy related CO2

Measures in terms of dimension and network	<p><b>Accomplishment of low carbon regional structure and socio-economy</b></p> <p>Low carbon urban designing</p> <ul style="list-style-type: none"> <li>-Promotion of two dimensional energy use (i.e. regional air conditioning, etc.)</li> <li>-Reduction of CO2 through the improvement of thermal environment by heat island countermeasures including</li> </ul> <p>Low carbon public transportation</p> <ul style="list-style-type: none"> <li>-Promoting the use of public transportation</li> <li>-Establishment of a system to realize smooth flow of road traffic</li> <li>-Realization of environmentally sound traffic (EST), etc.</li> </ul> <p>Formulation of low carbon distribution system of goods</p> <ul style="list-style-type: none"> <li>-Promotion of CO2 emissions reduction by collaboration between consignee and distributors</li> <li>-Enhancement of efficiency of distribution of goods</li> </ul> <p>Two dimensional introduction of new energy and the promotion of</p> <ul style="list-style-type: none"> <li>-Establishment of a network dispersive type new energy</li> <li>-Promotion of the use of biomass</li> <li>-Efficient use of non used energy</li> </ul>									
	Individual measures	<p><b>Measures taken facility/body by facility</b></p> <table border="1"> <tr> <td> <p>Efforts by manufacturers</p> <ul style="list-style-type: none"> <li>-Steady implementation of voluntary action plan</li> <li>-Take thorough energy management in factories</li> <li>-Efforts by industrial sector in transportation and household sectors</li> </ul> </td> <td> <p>Efforts by transportation sector</p> <ul style="list-style-type: none"> <li>-Promotion of the use of environmentally sound vehicles</li> <li>-Promotion of effectiveness of distribution of goods</li> <li>-Green management certification system for transportation businesses</li> </ul> </td> <td> <p>Introduction of low carbon management in business facilities</p> <ul style="list-style-type: none"> <li>-Steady implementation of voluntary action plan</li> <li>-Thorough management of energy under the Energy Saving Law</li> <li>-Enhancement of energy saving capability of buildings</li> <li>-Facilitation of Building Energy</li> </ul> </td> <td> <p>Introduction of low carbon management of households</p> <ul style="list-style-type: none"> <li>-Comprehensively provide information for residents on the dissemination of energy saving type apparatus</li> <li>-Dissemination of Home Energy Management System (HEMS)</li> <li>-Enhancement of energy saving capability</li> </ul> </td> <td> <p>Introduction of low carbon management of energy supply</p> <ul style="list-style-type: none"> <li>-Promotion of nuclear generation</li> <li>-Promotion of new energy (i.e. wind generation, etc.)</li> <li>-Acceleration of the shift to natural gas</li> <li>-Realization of a hydrogen society (i.e. fuel cell, etc.)</li> </ul> </td> </tr> </table>					<p>Efforts by manufacturers</p> <ul style="list-style-type: none"> <li>-Steady implementation of voluntary action plan</li> <li>-Take thorough energy management in factories</li> <li>-Efforts by industrial sector in transportation and household sectors</li> </ul>	<p>Efforts by transportation sector</p> <ul style="list-style-type: none"> <li>-Promotion of the use of environmentally sound vehicles</li> <li>-Promotion of effectiveness of distribution of goods</li> <li>-Green management certification system for transportation businesses</li> </ul>	<p>Introduction of low carbon management in business facilities</p> <ul style="list-style-type: none"> <li>-Steady implementation of voluntary action plan</li> <li>-Thorough management of energy under the Energy Saving Law</li> <li>-Enhancement of energy saving capability of buildings</li> <li>-Facilitation of Building Energy</li> </ul>	<p>Introduction of low carbon management of households</p> <ul style="list-style-type: none"> <li>-Comprehensively provide information for residents on the dissemination of energy saving type apparatus</li> <li>-Dissemination of Home Energy Management System (HEMS)</li> <li>-Enhancement of energy saving capability</li> </ul>
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\*Policy measures and the index for assessment of individual measure should be clarified to accomplish steady implementation by evaluation and review.

## ②CO<sub>2</sub> from non-energy sources

- Promote the use of blended cement and promotion of reduction measures on CO<sub>2</sub> generated by waste incineration.

## ③Methane

- Reduction of final disposal volume.

## ④N<sub>2</sub>O

- Incineration facility for sewage sludge, improvement of incineration process in municipal solid waste disposal facility.

## ⑤CFCs(HFC、PFC、SF<sub>6</sub>)

- Promote systematic actions by industries and development and use of alternatives.
- Collect HFC filled in apparatus as refrigerant complying with regulation.

## (2) GHG Sinks

### ①Securing absorption

Japan will comprehensively and steadily promote measures to achieve the goals of the Basic Plan for Forest and Forestry.

### ②Promote urban greening

## (3) Kyoto Mechanism

Public and private sectors will further cooperate to promote the effective utilization of Kyoto Mechanism, by which environment-related technologies are transferred to developing countries in exchange for emission credits. Measures to facilitate credit acquisition will be discussed with a view to implementing them from FY2006.

#### (4) Cross-sectoral measures

##### ○Public awareness raising campaign

Japan will disseminate information, improve environmental education to encourage every citizen to take action, in collaboration with economic circle, NPOs, labour organisations and academic circle, etc.

##### ○Initiatives by public institutions

Japan will create a new action plan. Its progress will be annually reviewed by the Global Warming Prevention Headquarters and the results will be made public.

##### ○GHG Accounting, Reporting and Announcement

Individual action is expected through informing the general public of the actual status of GHG emissions. Amendments to the Law for the Promotion of Global Warming Prevention Measures will be proposed for that purpose.

##### ○Introduction of summer time

Encourage national discussion on the possible introduction of summer time which include discussion on lifestyle and work style. Engender environmental awareness and form a consensus on the issue through this discussion.

##### ○Policy mix

Reduce GHG emission effectively and efficiently. While doing so, utilize the concept of policy mix which mobilizes all measures including voluntary, regulatory, economic and informational ones. (Environmental tax is an issue which requires sincere and comprehensive examination. Domestic emissions trading mechanism is also an issue for examination.)

#### (5) Basic measures

Prepare domestic systems to account GHG emissions and absorption. Promote technological development and R&D comprehensively. Strengthen monitoring and observation systems.

Promote international collaboration and cooperation in combating global warming.

## 5. Organisational arrangements

- The Global Warming Prevention Headquarters will conduct annual review and quantitative assessment of the Plan in FY 2007.
- The Headquarters will take the lead in steadily implementing the Plan. Working groups will be established under the Headquarter for the public awareness campaign and other agendas, in collaboration with relevant ministries and agencies.
- "Conference on the Promotion of Energy-related Regional Global Warming Measures" will be established in each regional block, and relevant ministries and agencies will back up regional undertakings, in collaboration with local governments.