

Japan's Strategies to Combat Global Warming

- An Environmental Policy Perspective-

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Global warming strategies relate to many policy areas

Composition of a joint conference of relevant councils concerning domestic policies to combat the problem of global warming:

- **Social Policy Council**
- **Industrial Structure Council**
- **Panel on Infrastructure Development**
- **Central Environmental Council**
- **Transport Policy Council**
- **Advisory Committee on Natural Resources and Energy**
- **Information and Communications Council**
- **Forestry Policy Council**

Legal Framework of Japan's Strategies to Combat Global Warming

The Basic Environment Law

The Basic Environment Plan

Law Concerning the Promotion of Measures to Cope with Global Warming

Kyoto Protocol Target Achievement Plan

Law Concerning the Protection of the Ozone Layer through the Control of Specified Substances and Other Measures, Chlorofluorocarbons Recovery and Destruction Law, Home Appliances Recycling Law, Automobile Recycling Law

Law Concerning the Rational Use of Energy

Law on Temporary Measures to Promote Business Activities for the Rational Use of Energy and Utilization of Recycled Resources

Special Measures Law concerning Promotion of the Use of New Energy

Special Measures Law Concerning Promotion of the Use of New Energy by the Electricity Suppliers

The Basic Environment Plan

- Confirms the goal of “building a sustainable society”
 - Lists 11 strategic programs
 - Promotion of measures to combat global warming is the first strategic program
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Ultimate Objective of Strategies to Combat Global Warming

- "stabilization of greenhouse gas concentrations in the atmosphere to a level that would prevent dangerous anthropogenic interference with the climate system" (The Basic Environment Plan)

Medium to Long-term Objectives of Strategies to Combat Global Warming

- “To build a social framework that allows incorporation of measures to reduce greenhouse gas emissions while ensuring consistency with the policies of each sector, and taking into account Japan’s social and economic trends into the 21st Century”
- “After achieving the targets of the Kyoto Protocol’s first commitment period, to work towards further long-term and ongoing emissions reductions”
(The Basic Environment Plan)



Short-term Objectives of Strategies to Combat Global Warming

- **Reduction of greenhouse gas emissions by 6% from 1990 levels (1995 levels of HFC, PFC and SF6) during the period from 2008 to 2012.**



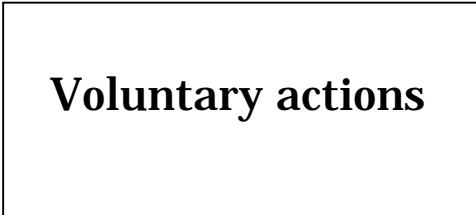
Guiding principles for construction of the domestic system

- 1. Strict observance of targets and the building of a sustainable society**
- 2. Steady promotion of domestic measures and contribution to global greenhouse gas reduction**
- 3. Adoption of a policy mix and participation of all major entities**

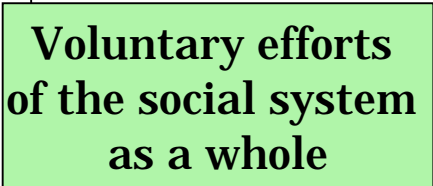
**Policy direction
and objectives**



Voluntary actions



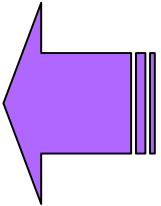
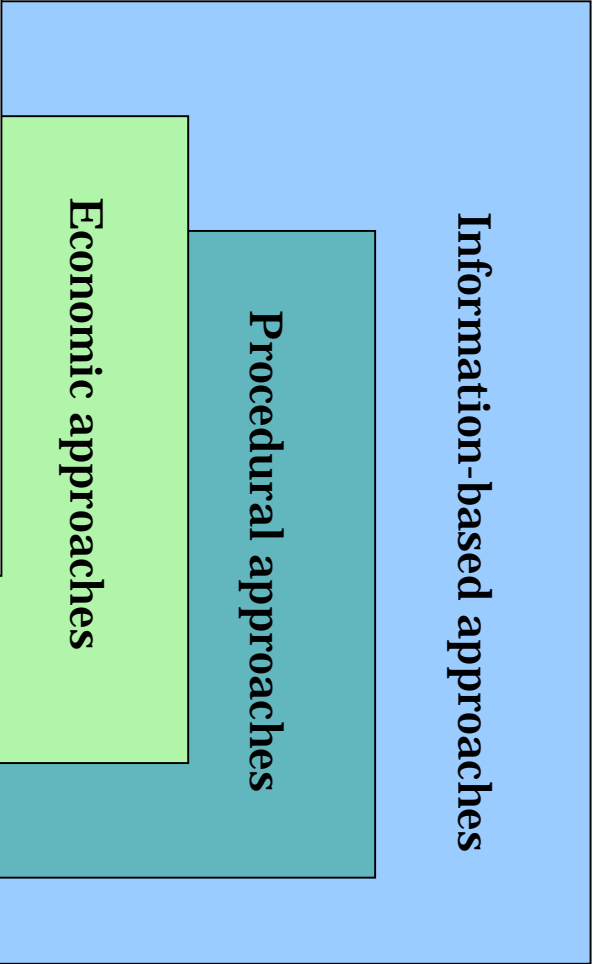
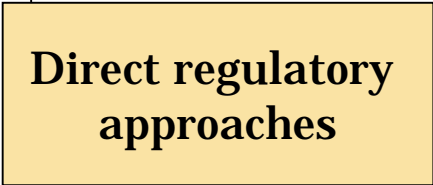
**Voluntary efforts
of the social system
as a whole**



**Structural
regulatory
approaches**



**Direct regulatory
approaches**



**Achievement of objectives through
the actions of each major entity**

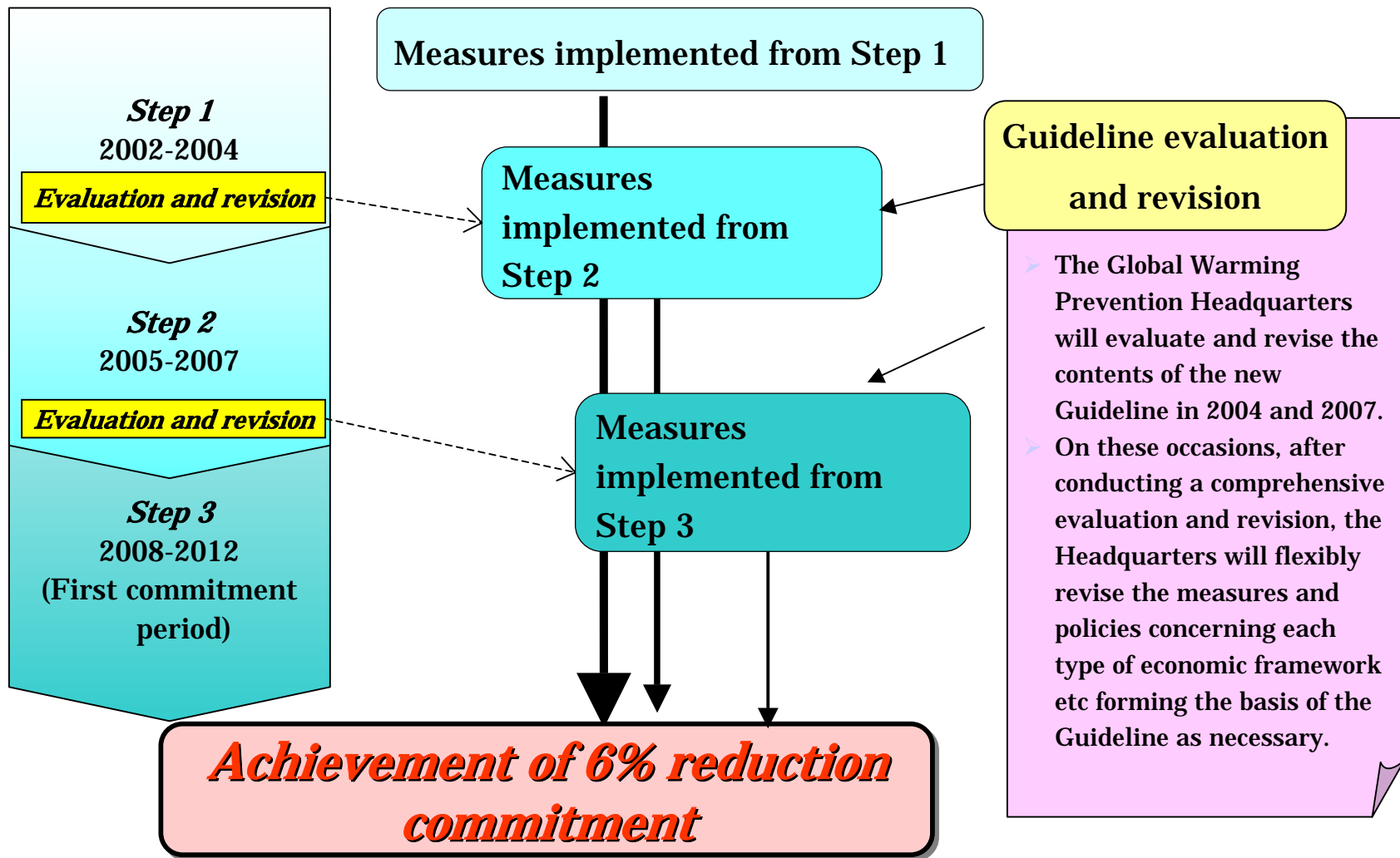


Japan's Efforts

- **Global Warming Prevention Action Plan 1990**
Aims to stabilize per person carbon dioxide emissions at 1990 levels by the Year 2000.
- **Guideline of Measures to Prevent Global Warming 1997**
- **Basic Policy on Promotion of Measures to Cope with Global Warming 1999**
- **Guideline of Measures to Prevent Global Warming (revised) 2002**
Changed name to the Kyoto Protocol Target Achievement Plan after the Kyoto Protocol came into effect



Quantitative evaluation and revision of the Guideline's implementation at each step



Guideline reduction targets for each sector

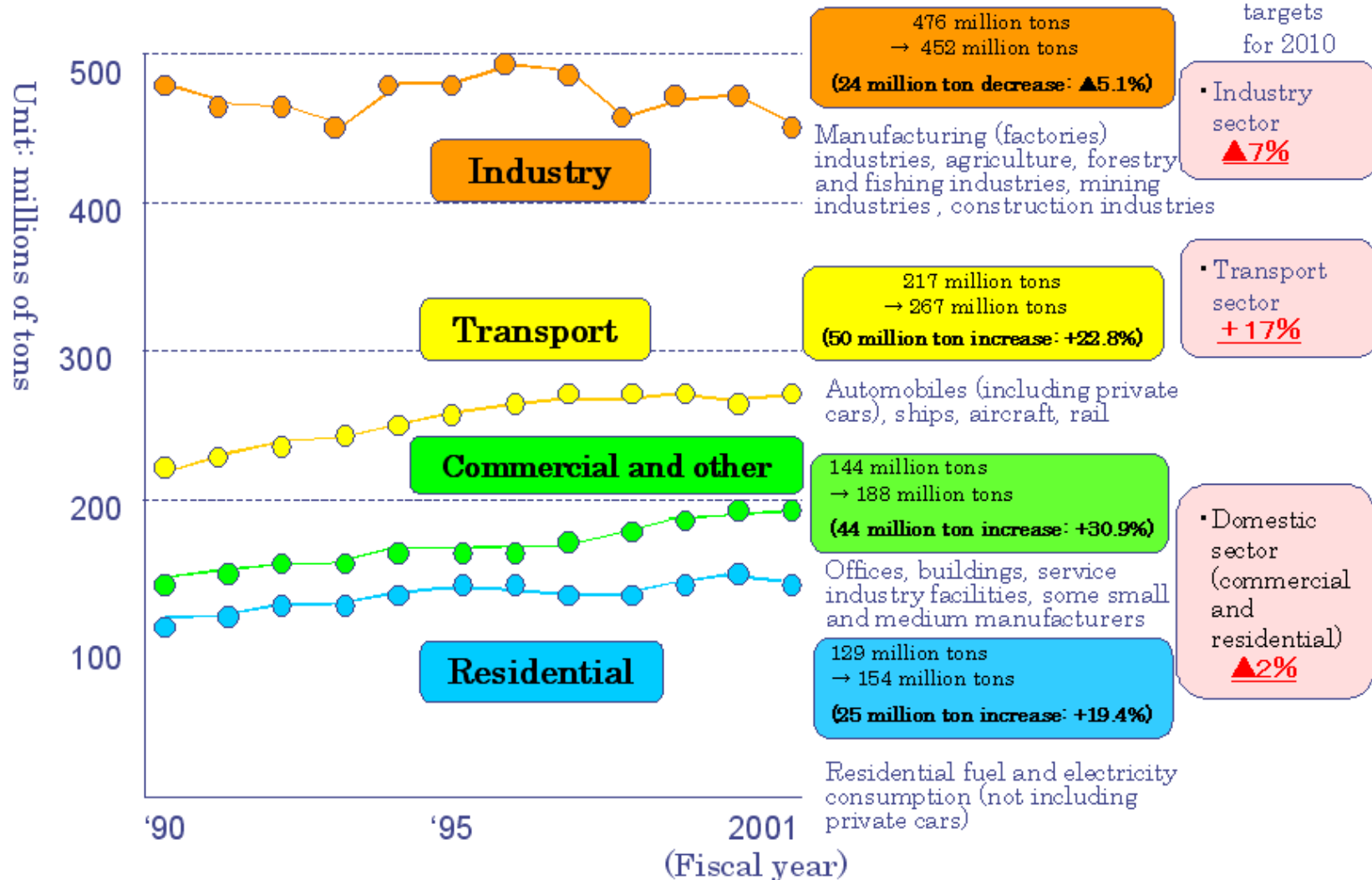
(Ratio of total emissions compared to the base year)

Category		Target
1. Carbon dioxide emissions from energy use	Industry sector: ▲7% compared to base year Domestic sector: ▲2% compared to base year Transport sector: +17% compared to base year	±0.0%
2. CO ₂ emissions from non-energy use, methane emissions, and nitrous oxide emissions		▲0.5%
3. Reductions through innovative technologies and additional global warming prevention activities of all citizens		▲2.0%
4. Alternative CFCs etc. (3 gases)		+2.0%
5. Securing sinks through forest management etc.		▲3.9%

With regard to the remaining 1.6%, the Government will study the way to use the Kyoto Mechanisms, taking into account the principle that they are supplementary to domestic measures

Overall target achievement of ▲6%

CO₂ Emissions by Sector



Industry

476 million tons
→ 452 million tons
(24 million ton decrease: **▲5.1%**)

Manufacturing (factories) industries, agriculture, forestry and fishing industries, mining industries, construction industries

• Industry sector
▲7%

Transport

217 million tons
→ 267 million tons
(50 million ton increase: **+22.8%**)

Automobiles (including private cars), ships, aircraft, rail

• Transport sector
+17%

Commercial and other

144 million tons
→ 188 million tons
(44 million ton increase: **+30.9%**)

Offices, buildings, service industry facilities, some small and medium manufacturers

• Domestic sector (commercial and residential)
▲2%

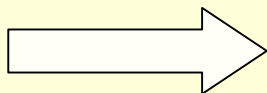
Residential

129 million tons
→ 154 million tons
(25 million ton increase: **+19.4%**)

Residential fuel and electricity consumption (not including private cars)

Composition of the Guideline of Measures to Prevent Global Warming

- Target setting for each sector
- “Measures” for each sector (87)
- “Policies” for implementing “measures” (200)
- Quantitative estimates of the effect of measures and policies for reducing greenhouse gas emissions (measures: 66, policies: 3)

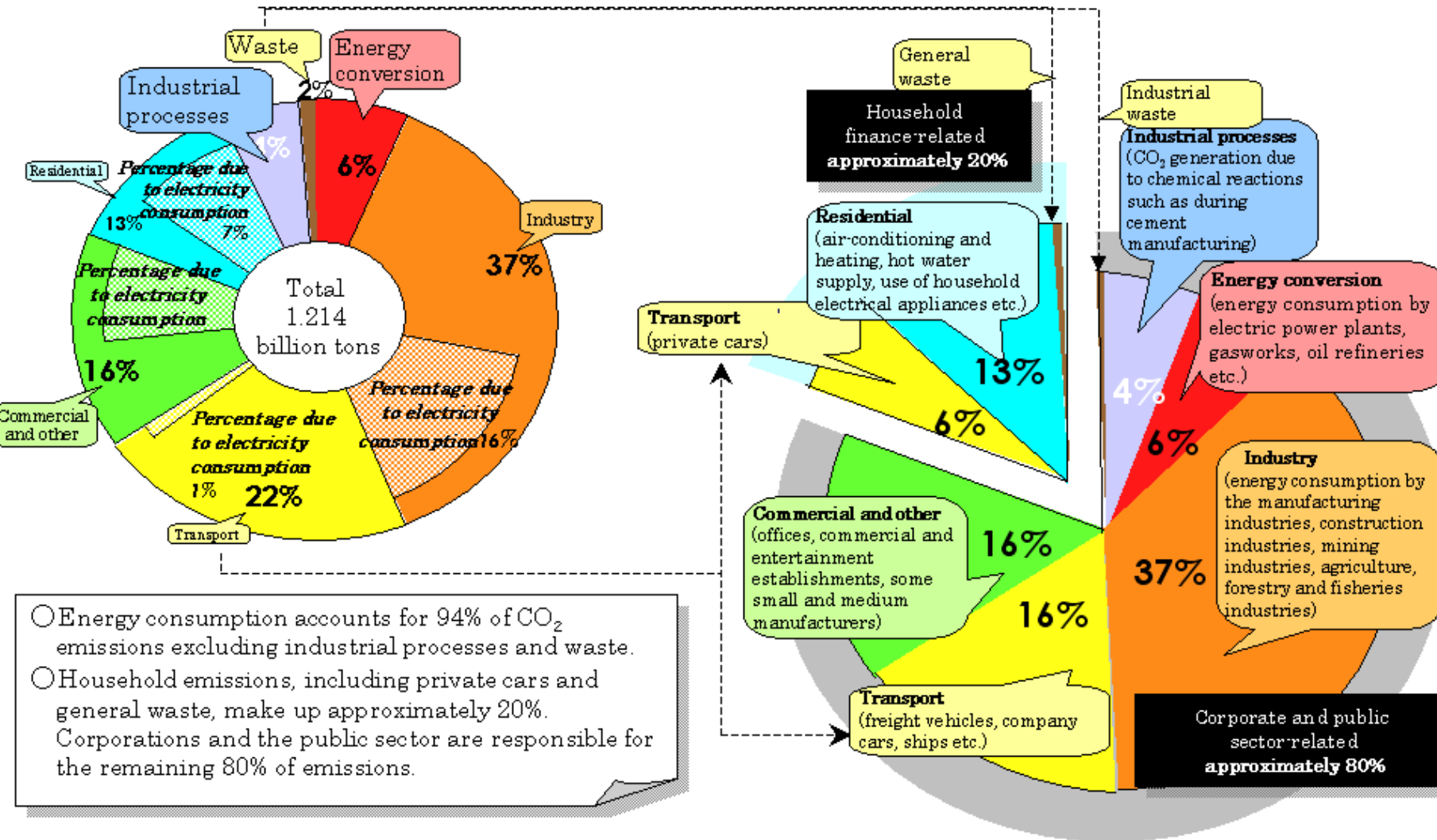


- It is easy to link this framework with the nationwide compilation of emissions inventories for each sector
- It is easy to organize measures and policies according to ministerial authority

Points for Concern

- Activities of individual firms, which are the main administering entities, are evaluated separately under the industry sector, commercial sector and transport sector categories
- There is no incentive to adopt comprehensive strategies making use of the characteristics of the administering entity

Breakdown of emissions volume by emissions source and administering entity



Difficulties regarding the Measures

- ❑ Problems with linking the measures with the methods for policy implementation
- ❑ Need for comprehensive and integrated consideration of what combination of policy implementation methods should be adopted, taking financial resources into account