GHG reduction approaches of Transport Sector in Japan

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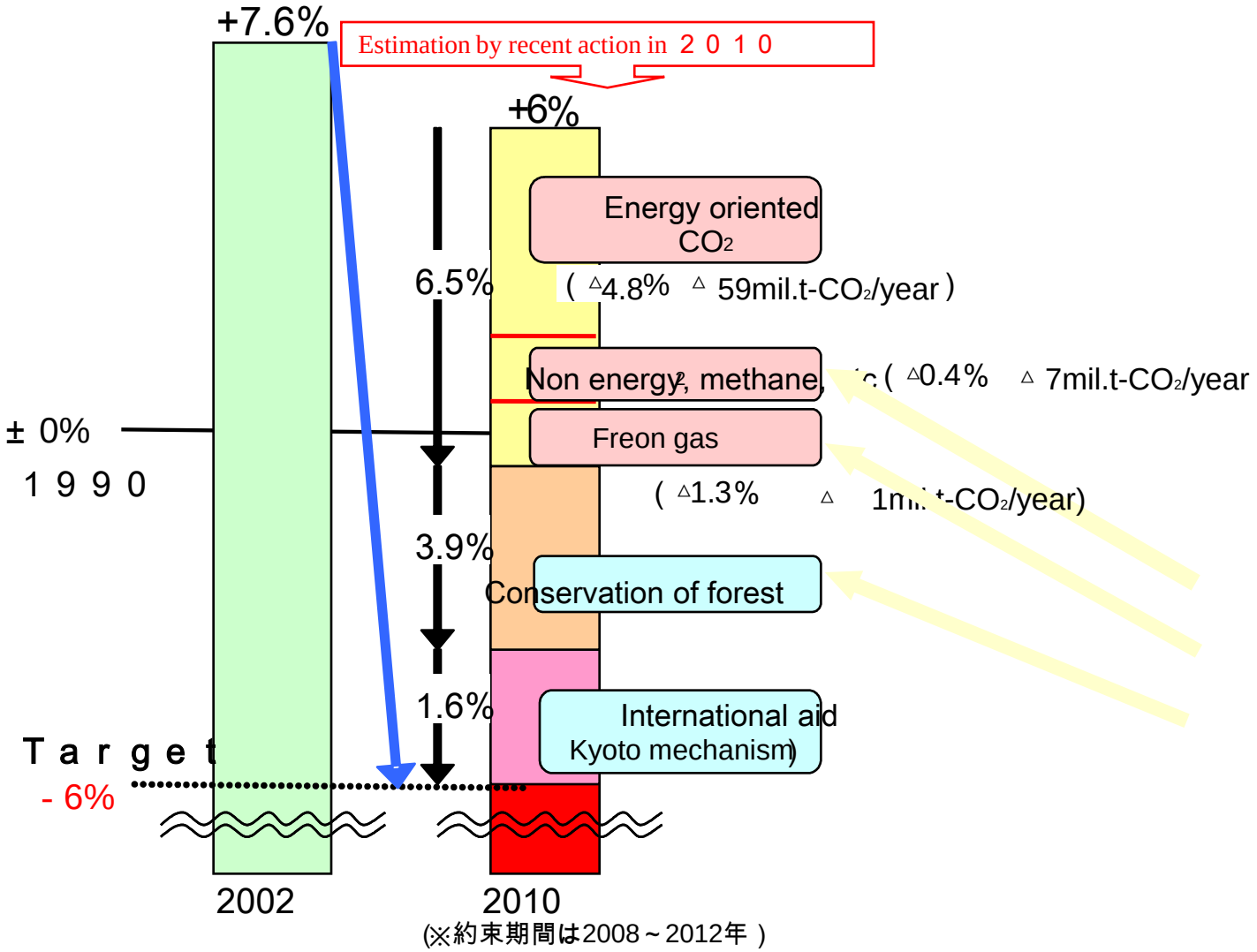
1.Total Target of CO2 of Japan

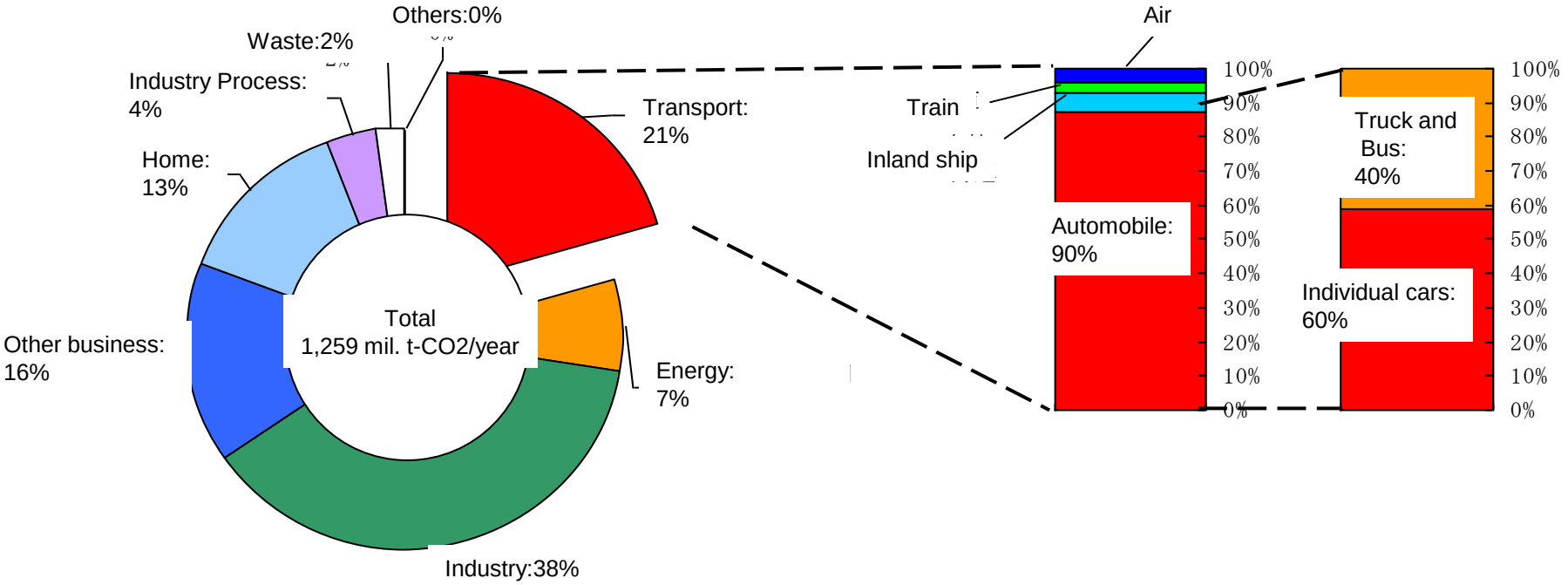


2. Sectoral Target CO2 in Japan

	FY1990	FY2002		FY2010 Targets in each section	
	A	B	(B - A) / A	C	(C - A) / A
	Mil.t-CO_2	Mil.t-CO_2		Mil.t-CO_2	
Energy Oriented CO_2	1,048	1,174		1,056	
Industry	476	468	(- 1.7%)	435	(- 8.6%)
Other civil	273	363	(+ 33.0%)	302	(+ 10.7%)
Other industry	144	197	(+ 36.7%)	165	(+ 15.0%)
Home	129	166	(+ 28.8%)	137	(+ 6.0%)
Transport	217	261	(+ 20.4%)	250	(+ 15.1%)
Energy Transfer	82	82	(- 0.3%)	69	(- 16.1%)

2. 1. C O 2 from Transportation in Japan

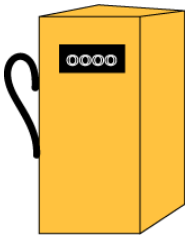
-21% of total CO2 is from Transportation
-90% of Transportation is from Automobiles
-60% of Automobiles is from Individual Cars



CO2 from Industrial Sections in FY2003

CO2 of Transportation in FY2003

2.3. Ground Policy



Fuel

Engine

Transport Condition

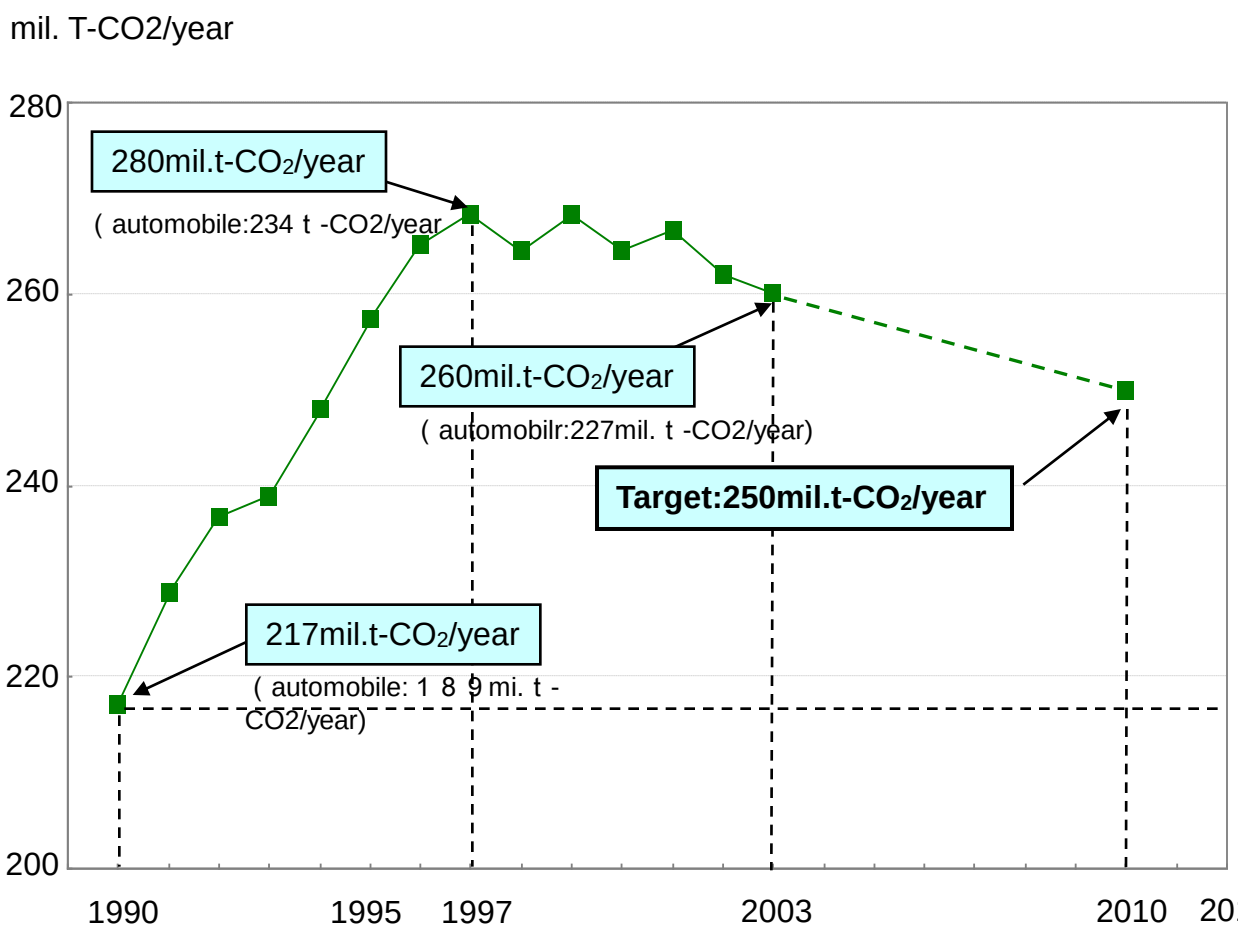
EST

Ministry of Land Infrastructure and Transport

CO_2

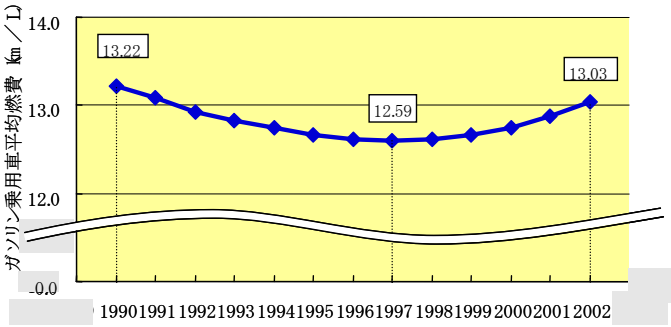
2.2. A Trend of CO2 from Transportation

-Target Volume of Transportation is 250 mil. t-CO2/year
-From 1997 CO2 from Transportation is decreasing
-1 mil. t-CO2/year is to be decreased every year



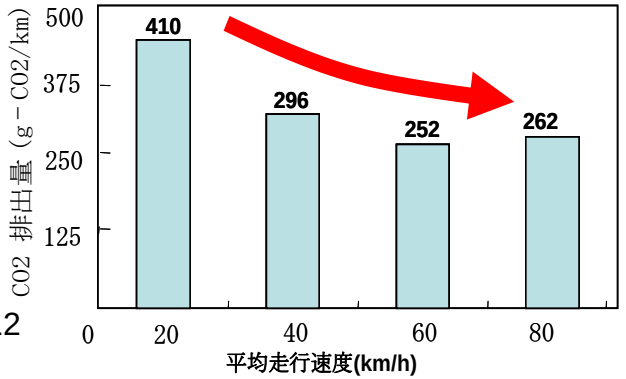
Trend of CO2 from Transportation

ガソリン乗用車の燃費は、1997年を境に改善傾向



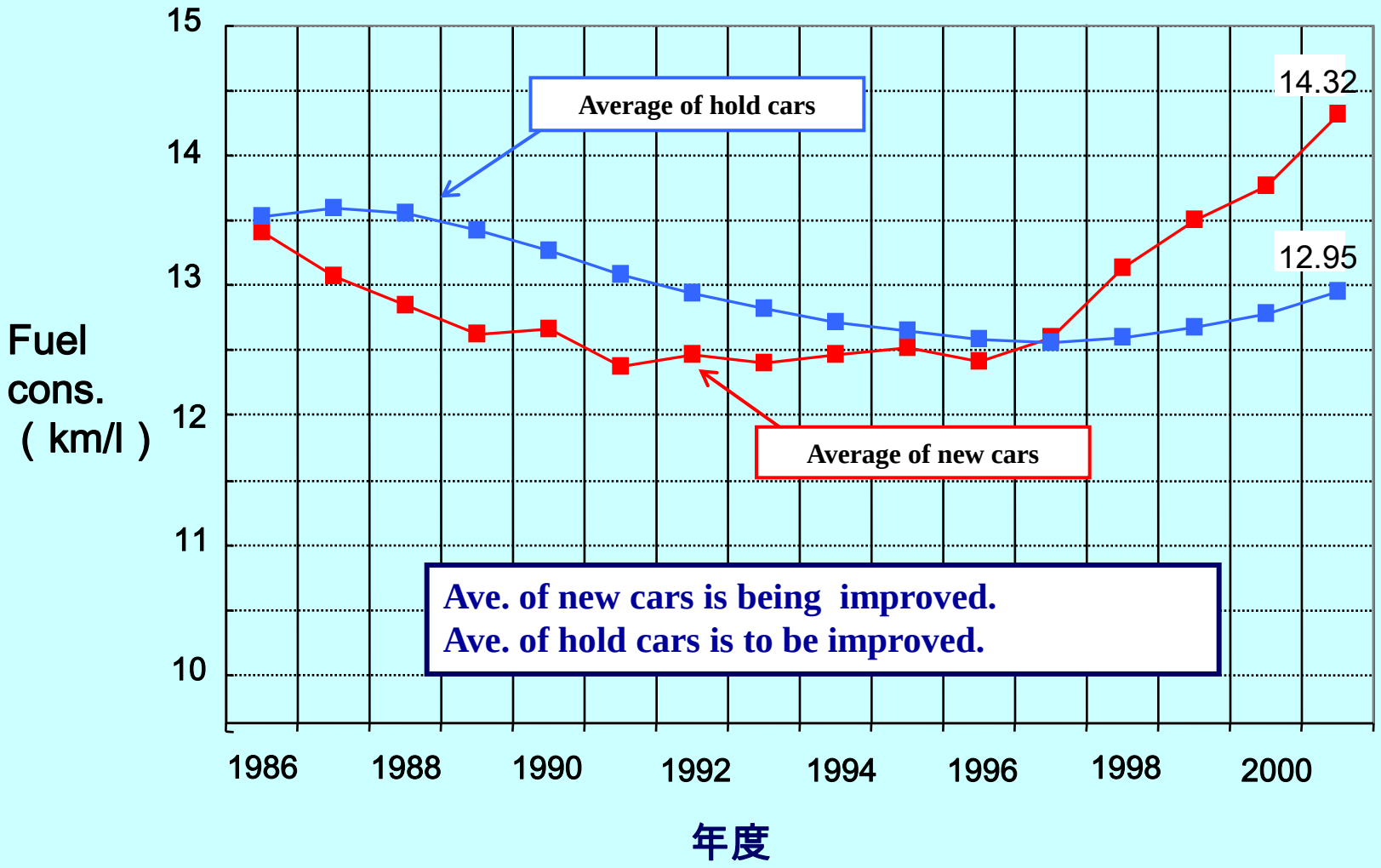
保有車両ベースのガソリン乗用車平均燃費 (km／L)の推移

道路整備により走行速度が向上すれば、CO2排出量が減少



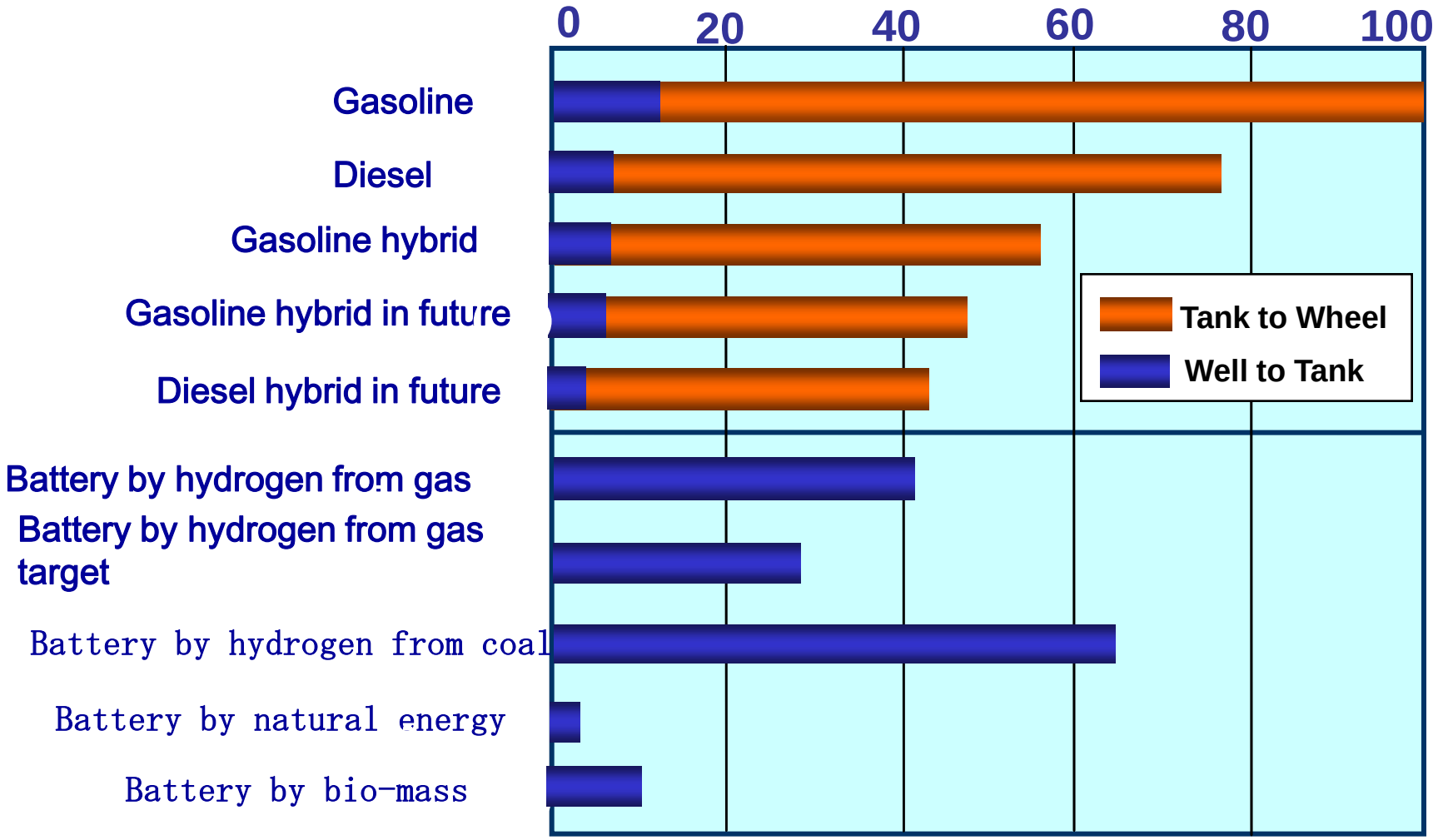
※都市部（DID地区）平均旅行速度20.6km

3. A trend of average fuel consumption ratio of individual cars



3.1.Comparison of CO2s among various automobile types

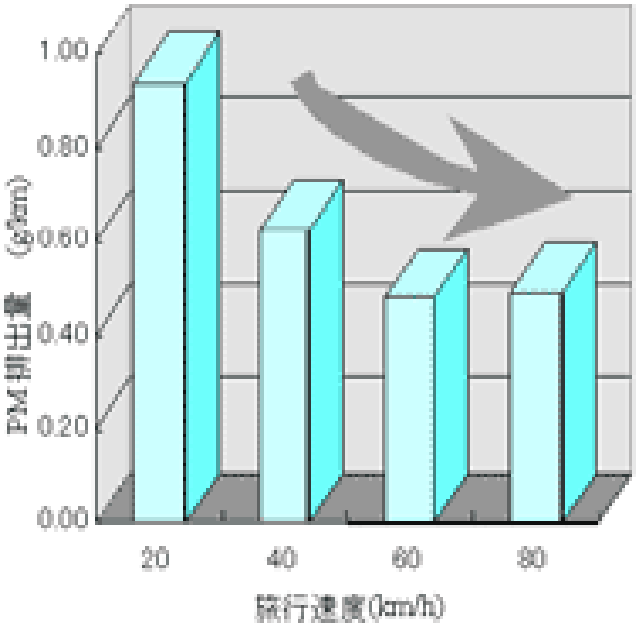
Ratios per gasoline car(=100)

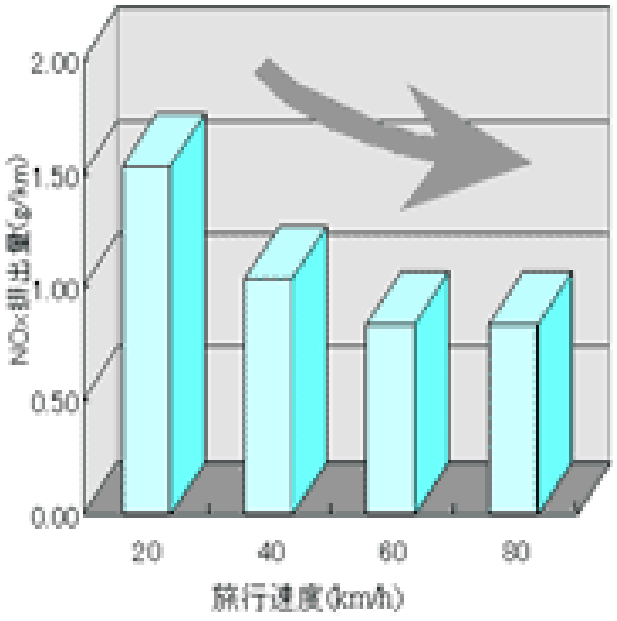


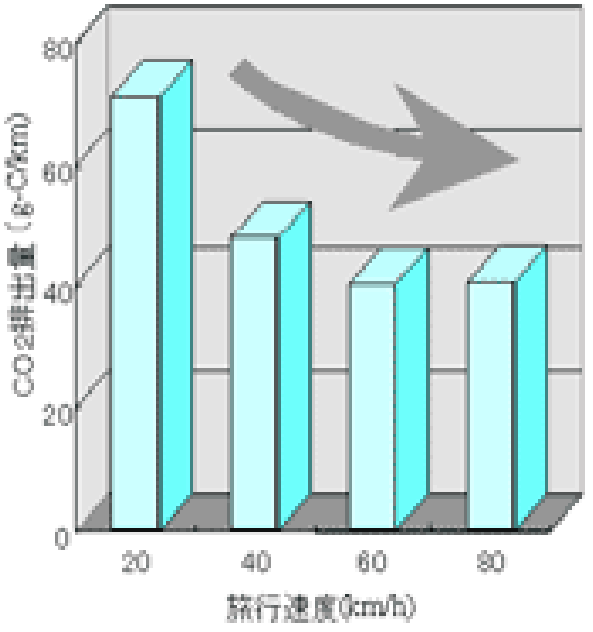
4.Better Transport Condition

Relationship between average speed and environmental load

PM NO_2 CO_2







5.Public transport (EST model Projects)

Purposes

- to encourage spontaneous effects from local
- to advertise advanced projects

Contents

- 1/3-1/1 government subsidization
- Total 1-100 mil. JPY
- 1-2 year project

Criteria for subsidization

- consensus-building among different concerned parties including transit companies to common goal
- to be expected synergy effect concentrating on multiple measures
- to promote systematic progress after termination of the Project

5.1.Social Experiment for EST

Example of menu of the Model Project

Encouragement of mass transit use			Facilitation of traffic flow		Measures for pedestrian and cyclist	Introduction of low-emission vehicles	Diffusion and enlightenment
Commuter traffic management	LRT improvement and revitalization of railroad	Revitalization of bus	Road maintenance and improvement	Traffic regulation	Improvement of relevant infrastructure	Introduction of low-emission vehicles	Activities for diffusion and enlightenment
Self-control of private car commute of employee/ Park and ride	Promotion of LRT Project/ Introduction of IC Card/ Improvement of transit centerffic junctions	Improvement of omnibus town services/ Improvement of PTPS bus stop/ Bus Location System and Non-step bus/ Common IC Card	Improvement of intersections/ Reduction of roadwork/ Elimination of bottleneck crossing	Priority lane for bus/ Promotion of counterm easures against illegal parking	Improvement of pedestrian way, cycle track and bicycle-parking space/ Introduction of transit mall base on the consent of local residents	Encouragement to introducing CNG bus/ Preferential treatment for low-emission vehicles	Public relations activities/ Organization of symposium and events

Promotion of LRT Project

Bus Location System

Priority lane for bus

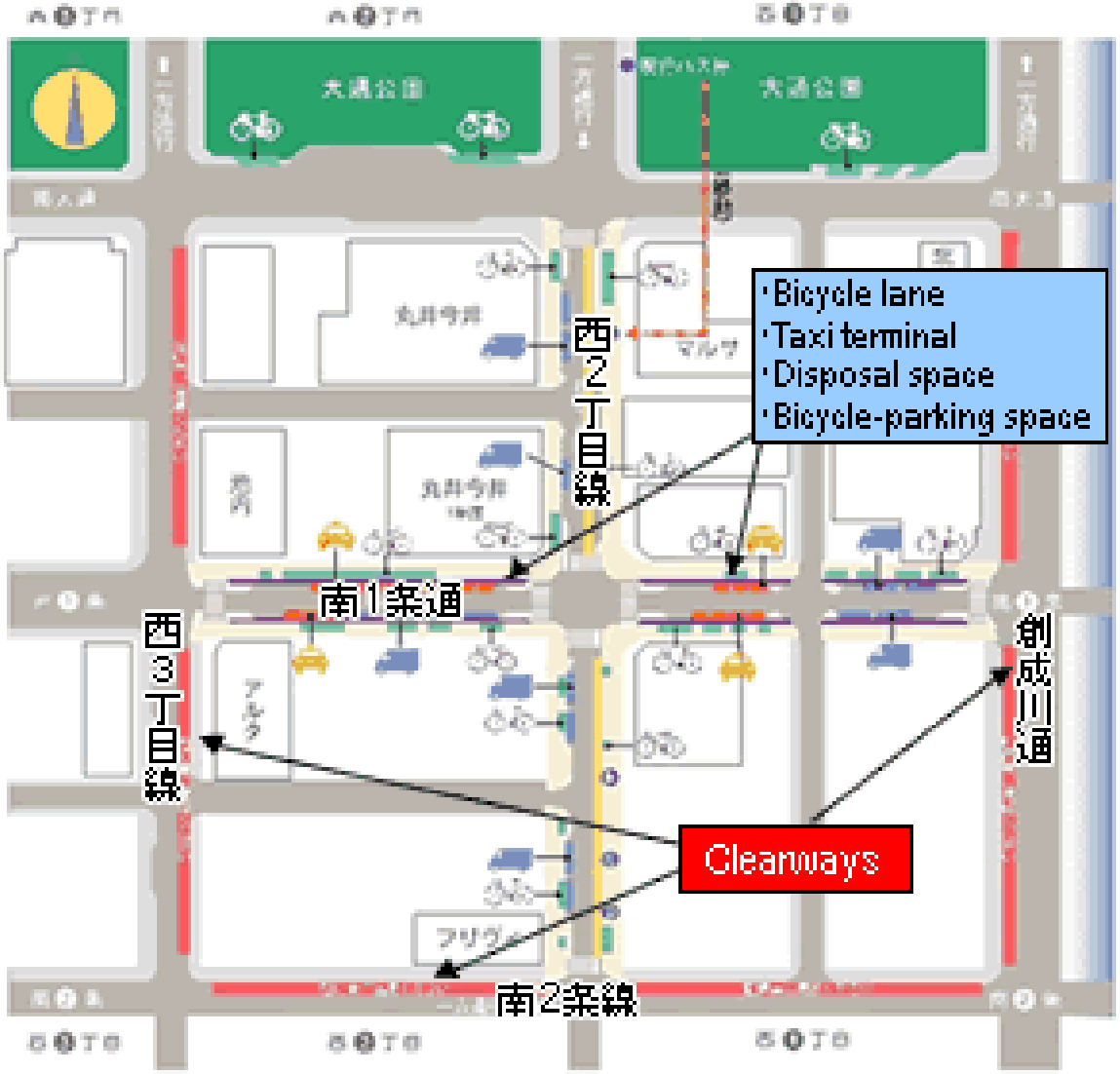
Improvement of pedestrian way and cycle track

Introduction of low-emission vehicles including CNG bus

5.2.An example of the Social Experiment in Sapporo City

Basic policies	Measure
Enriching transport system centering on mass transit	Amelioration of accessibility to the urban centers
	Amelioration of services within the urban centers
Facilitating traffic flow with reasonable car use	Measures for disposal
	Measures for on-street parking
	Measures for traffic passing over urban centers
	Measures for winter traffic
	Measures for bicycles
Realizing city revitalization by reallocation of road space	Classification of urban roads by function
	Utilization of spaces for pedestrian, bicycle, and vehicle
	Utilization of road space
Development of the Project by means of continuation of social experiment and collaboration with residents	Development of the Project and rules-based approach by means of continuation of social experiment and collaboration with residents
	Monitoring of traffic trend and understanding of resident assessment (satisfaction level)

5.2.1.Operation Area in Sapporo



- Bicycle lane
- Designated disposal space
- Bus lane
- Taxi terminal
- Cleanway (No-parking & No-standing)
- Bicycle-parking space
- A Jotetsu Bus
- B Donan Bus, Chuo Bus
- C Chuo Bus
- D Jotetsu Bus, City Bus

5.2.2. Examples in Sapporo

Bicycle Lane and Taxi Terminal

Disposal Space