
TOYOTA for the future

~In pursuit of 3 sustainabilities~

June 27, '08

Katsuaki Watanabe

President

Toyota Motor Corporation



Contents of speech

1. Environmental Awareness
2. TOYOTA for the future
3. Toyota's Human Resources Development and Expectation at educational institutes

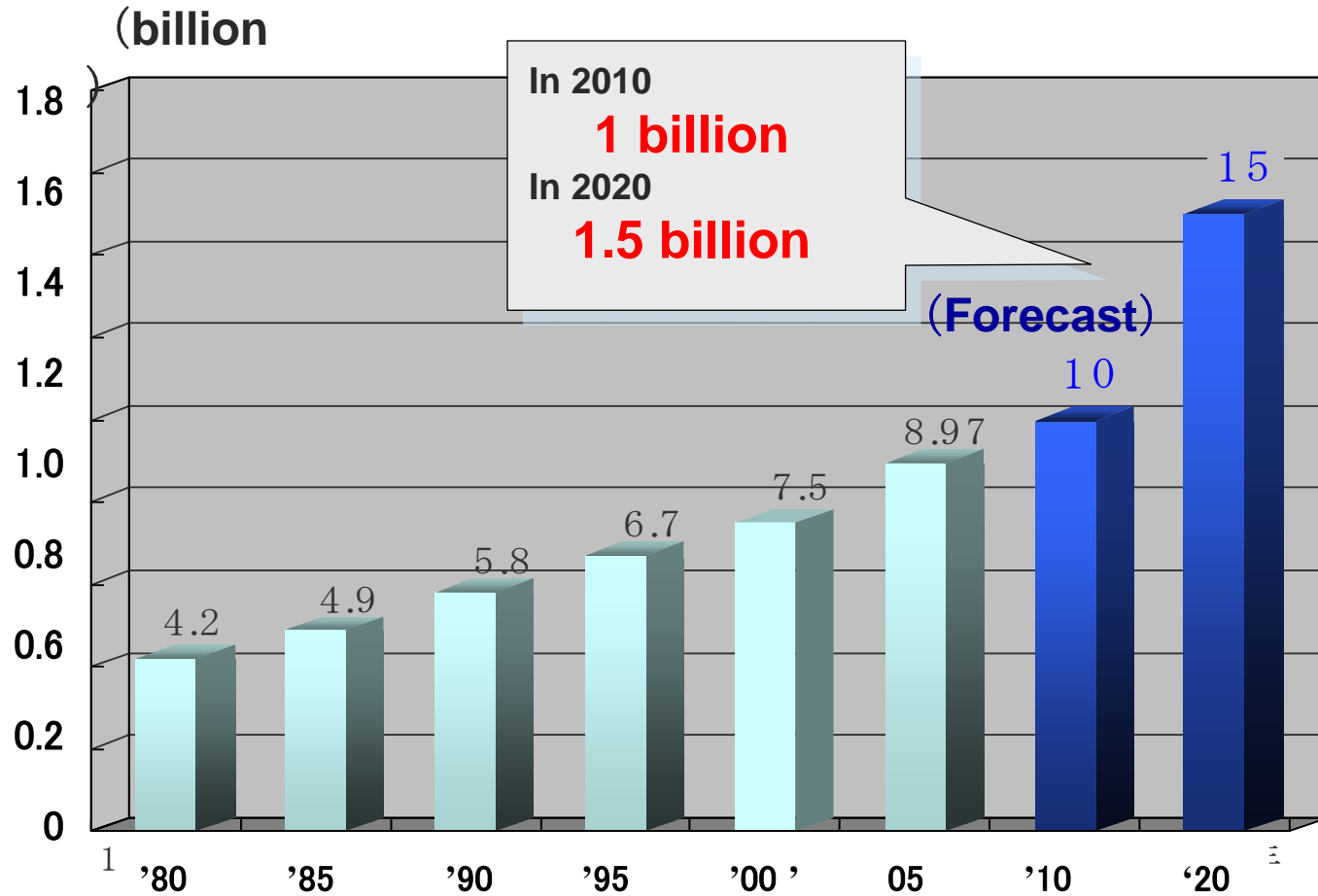
1. Environmental Awareness

① Globalization

② Environment and energy issues

① Globalization of car market

Vehicles In Use Worldwide → Growth of rising countries



▶ Significant impact on global environment

< Vehicles In Use Worldwide >

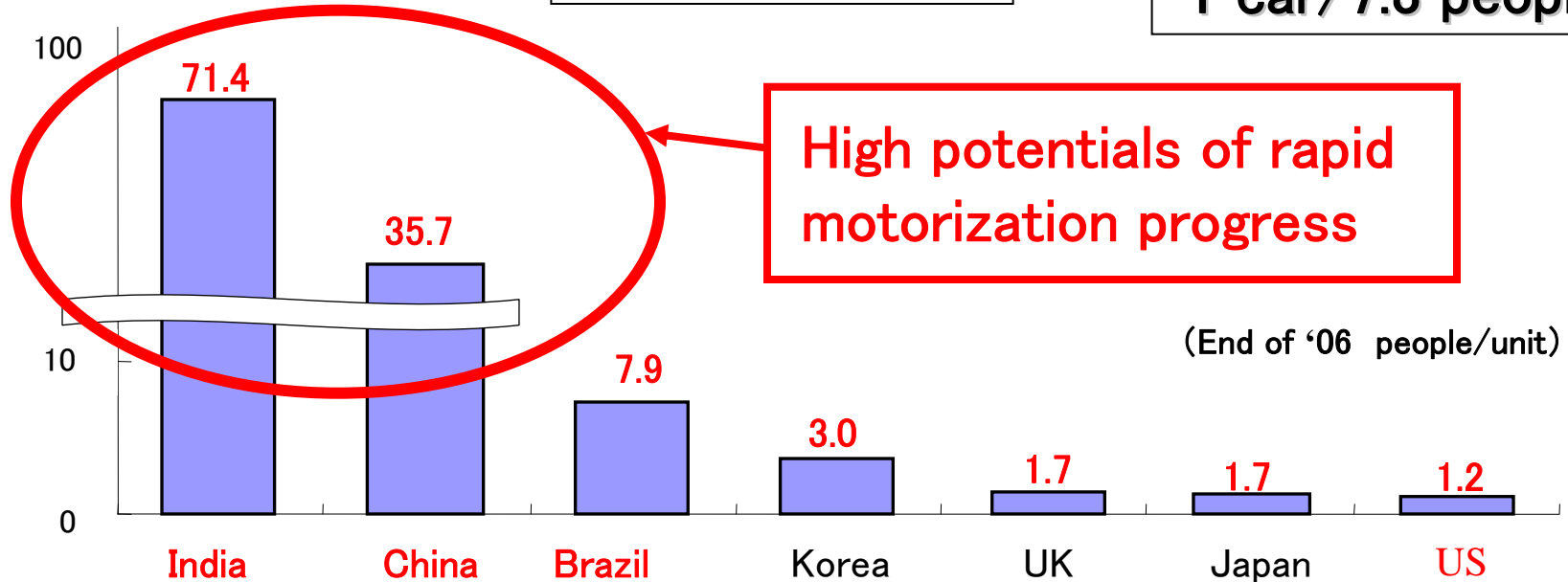
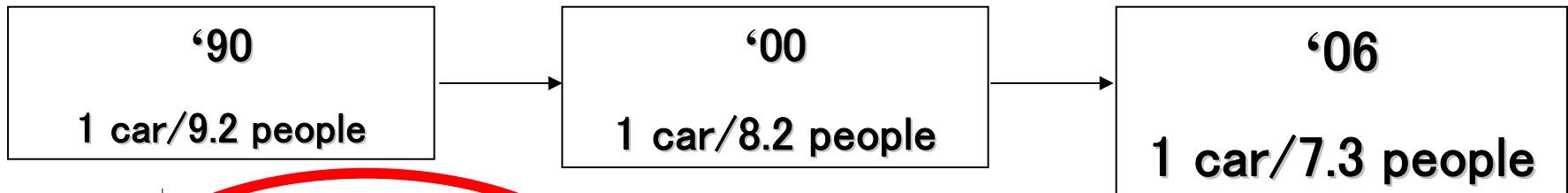
Source : Japan Automotive Manufacturing Association, inc.

Mitsubishi Research Institute, inc

① Globalization of car market

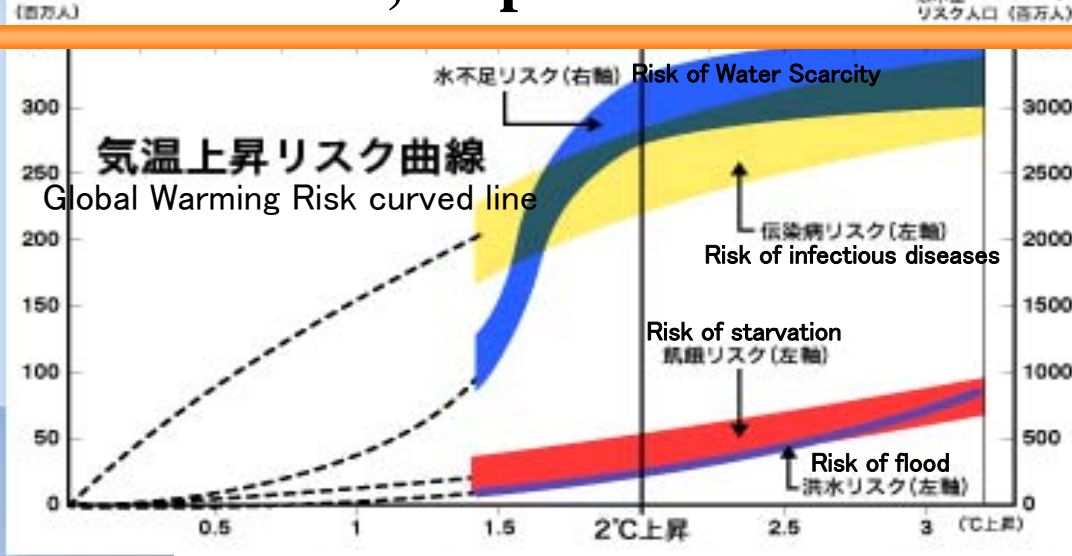
◆ Steady diffusion of automobile all over the world

Car ownership per capita worldwide



**Significant growth of BRICs market/economy
→ Acceleration of environment and energy issues**

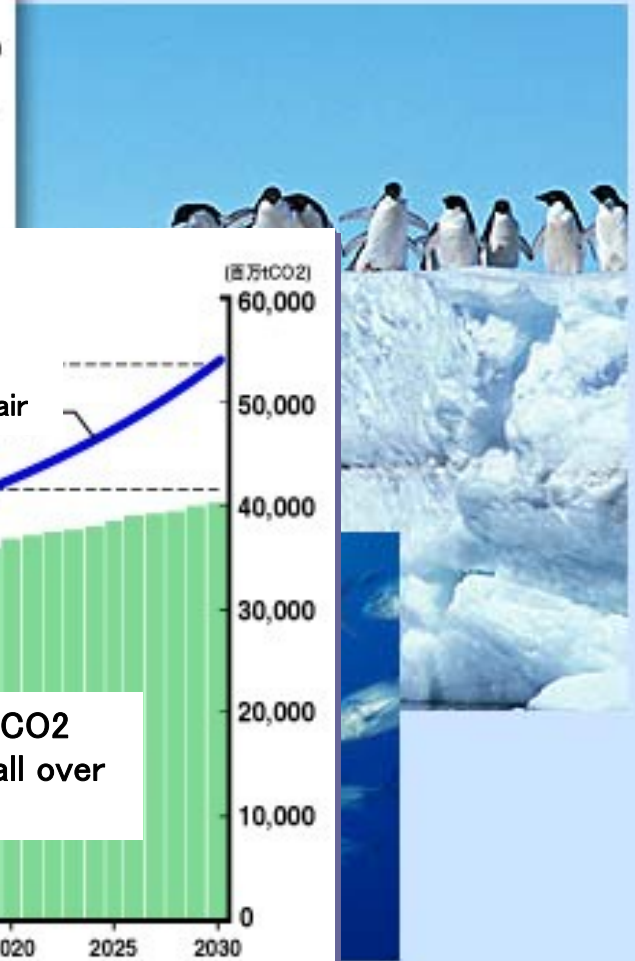
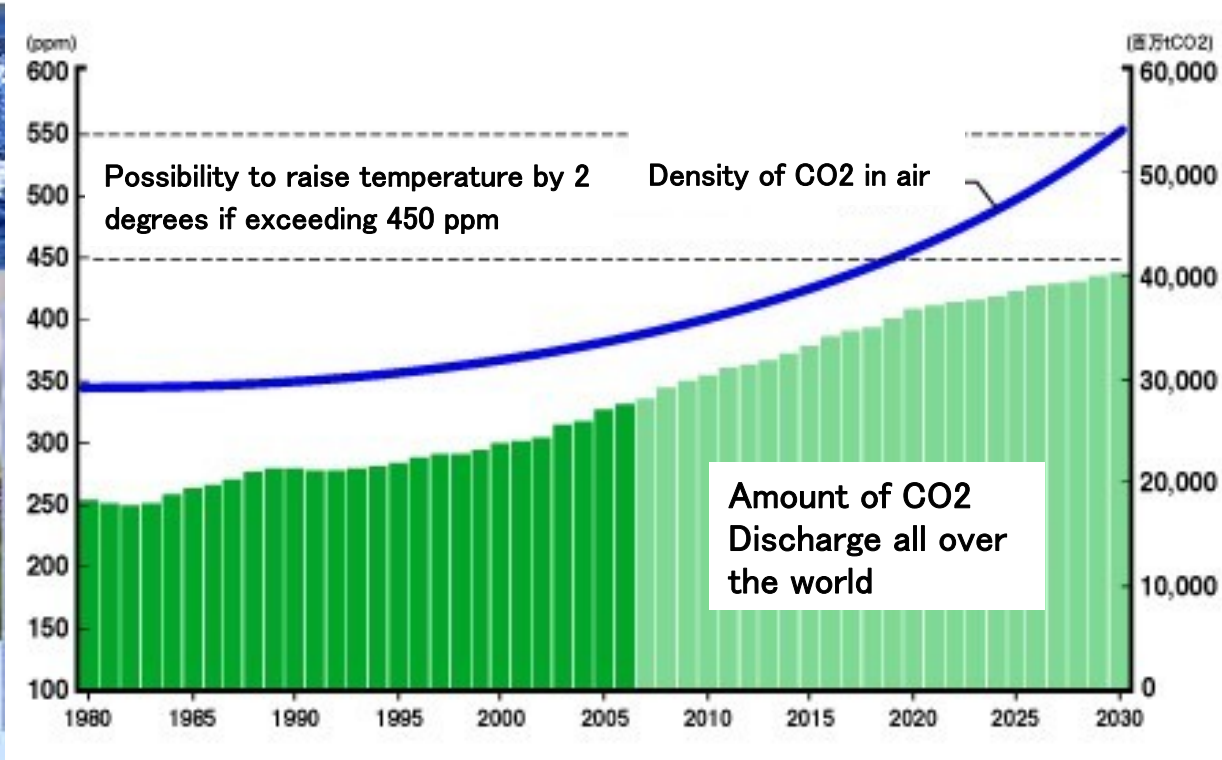
② Environment issue ; Rapid Acceleration of Global Warming



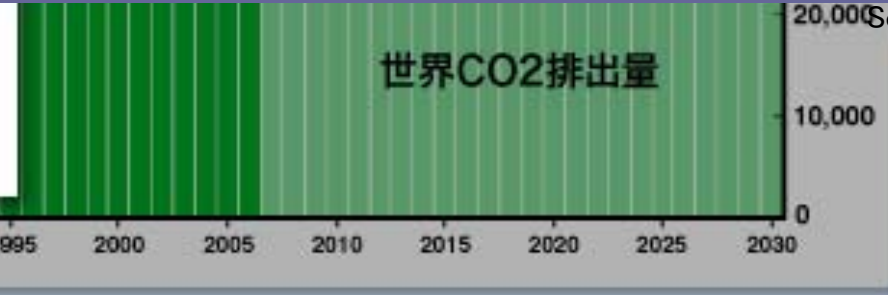
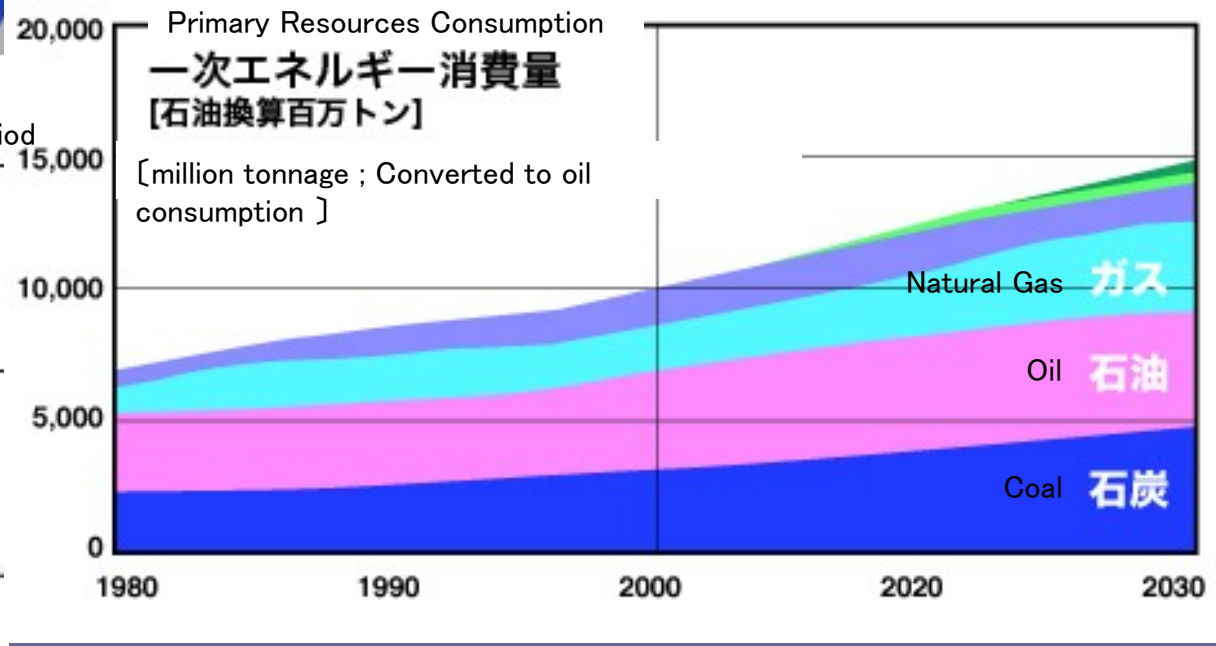
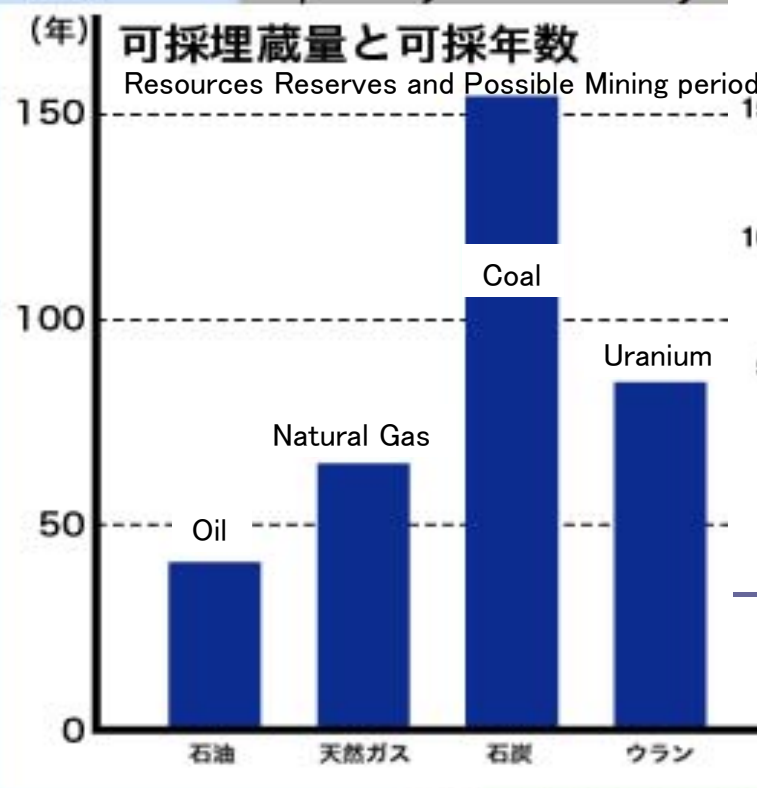
出典: IPCC



The source: IEIA



② Natural Resources Issues



Source : EEA Japan

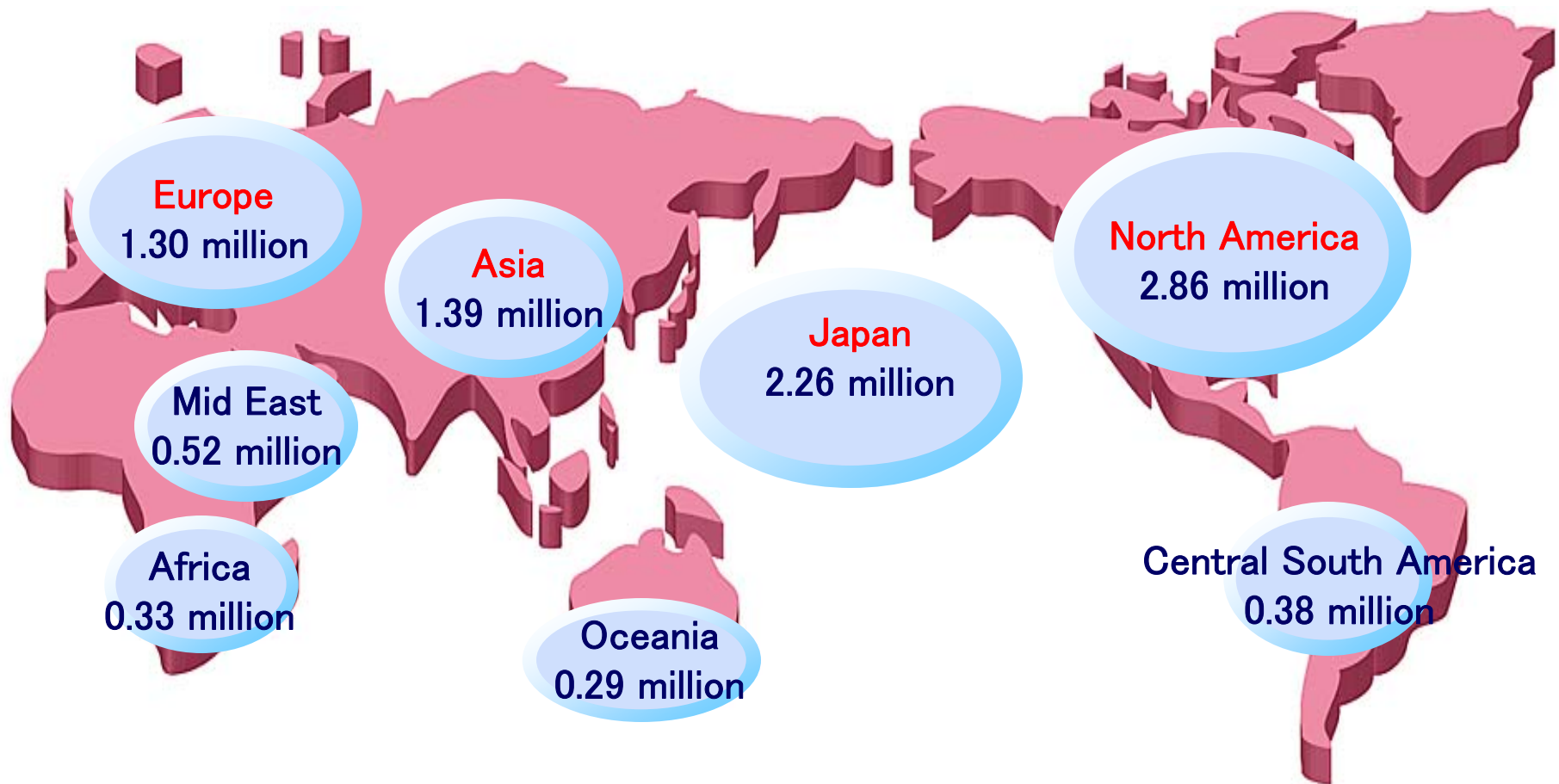
Source : EEA Japan

2. TOYOTA for the future

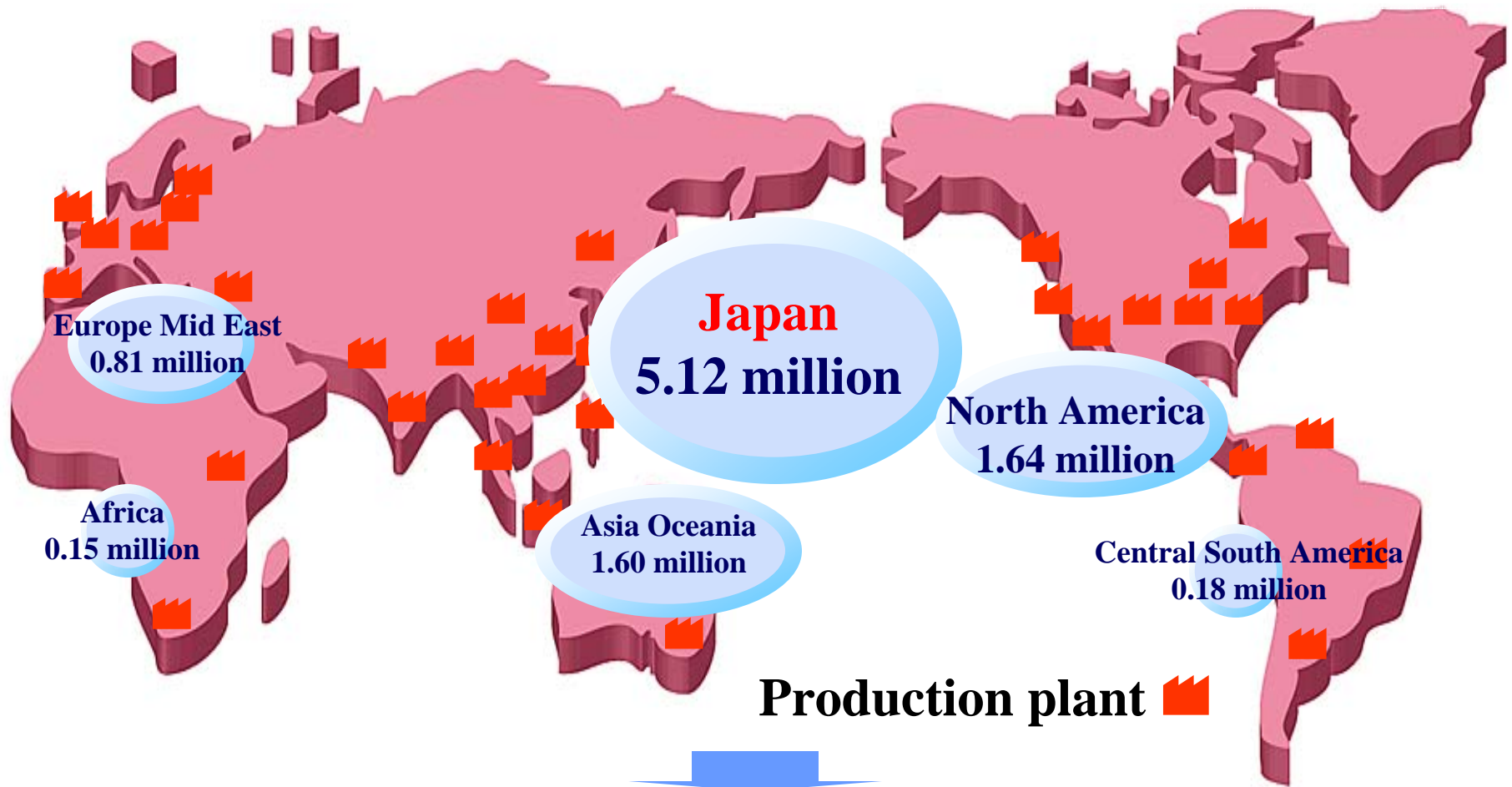
TOYOTA Global sales (2007) (Toyota, Lexus, Daihatsu, Hino brand)

◆ 9.33 million units in 170 countries/regions.

(global share ; about 13%)



◆ 9.50 million units produced in 27 countries/regions



No future for auto-industry without tackling issues of environment and energy.

< the spirit of our foundation >

Contribute to the development and welfare of the country through supply of automobiles



Contribute to the development of sustainable society and earth

(Sustainability)

Policies Guiding TOYOTA's Initiatives

12

<The Toyoda Precepts>

- 1, **Regardless of your position, work together to fulfill your duties faithfully and contribute to the development and welfare of the country.**
- 1, **Be at the vanguard of the times through endless creativity, inquisitiveness and pursuit of improvement.**
- 1, **Be practical and avoid frivolity.**
- 1, **Be kind and generous ; strive to create a warm, homelike atmosphere.**
- 1, **Be reverent, and show gratitude for things great and small in thought and deed.**



<TOYOTA GLOBAL VISION 2020>



TOYOTA GLOBAL VISION 2020

Open the Frontiers of Tomorrow
through the energy of people and technology

人と技術の力で明日の世界を切り開く



Sustainable growth of society and earth

**Environment
preservation**

+

**Economic
Growth**

Innovation in technology

People

**A
prosperous
low carbon
society**

Sustainable growth of society and earth

3 sustainabilities

In pursuit sustainability of

- ▶ **“R & D”**
- ▶ **“Monozukuri”**
- ▶ **“Social contribution activities”**

Monozukuri : Literal meaning is production or creation. But it implies more than simply manufacturing products but instead covers a set of activities and processes from production to sales and services, that create added value for customers.

Sustainable growth of society and earth

3 sustainabilities

In pursuit sustainability of

- ▶ **“R & D”**
- ▶ **“Monozukuri”**
- ▶ **“Social contribution activities”**

Monozukuri : Literal meaning is production or creation. But it implies more than simply manufacturing products but instead covers a set of activities and processes through production to sales and services, that create added value for customers.

In pursuit of sustainable mobilities

< Basic way of approach >

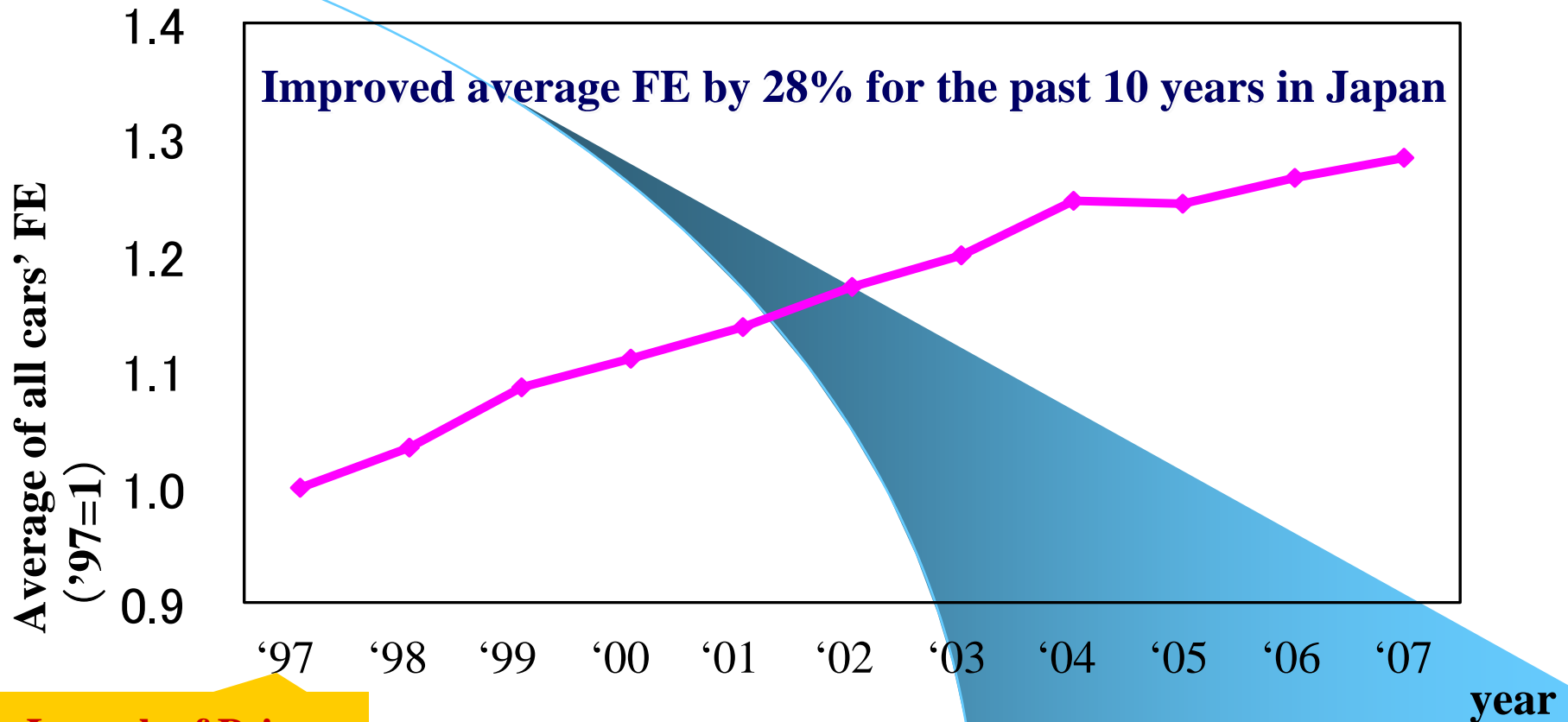
“Zeronize”
&
“Maximize”

< Domain of research >

- ▶ Environment
- ▶ Energy
- ▶ 安全
Safety
- ▶ Excitement

Increase in Fuel Efficiency of TOYOTA vehicles

< Transition of average FE >



Launch of Prius

Dissemination of Hybrid vehicles

< Benefits of Hybrid vehicles >

- ▶ Cleaner emissions
- ▶ Lower CO2 emissions
- ▶ Increased FE

< Expansion of Hybrid models >

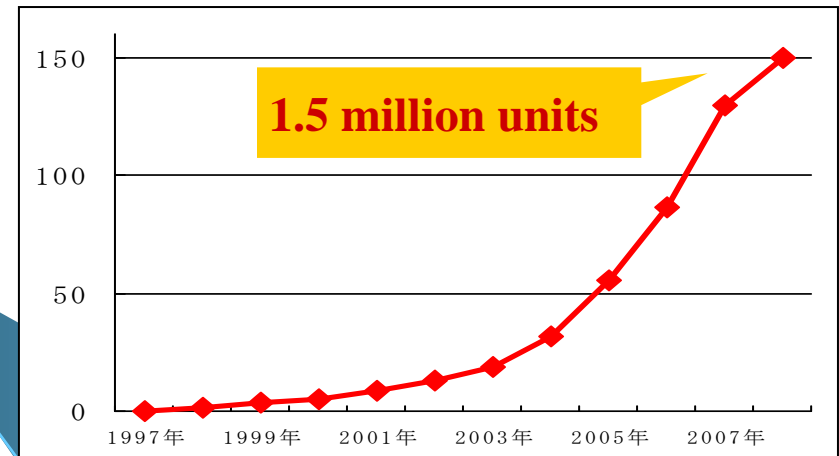


The first Prius



Estima Hybrid

< Cumulative sales ; 10 thousand >



< CO2, Fuel Consumption >

- ▶ Reduced approx. 7 million tons of CO2
- ▶ Reduced approx. 27 million kiloliters of gas

Dissemination of Hybrid vehicles

< Target for the present >

- ▶ Selling 1 million Hybrid vehicles at beginning of 2010
- ▶ More dissemination of Hybrid vehicles

< Future initiatives >

- ▶ Enhance performance, FE and quality
- ▶ Reduce size, weight and cost

- ▶ Accelerate new technology development, readied for mass production
- ▶ Lead time reduction

Energy Diversification

< Alternative Energy to oil >

Bio-energy

Electricity

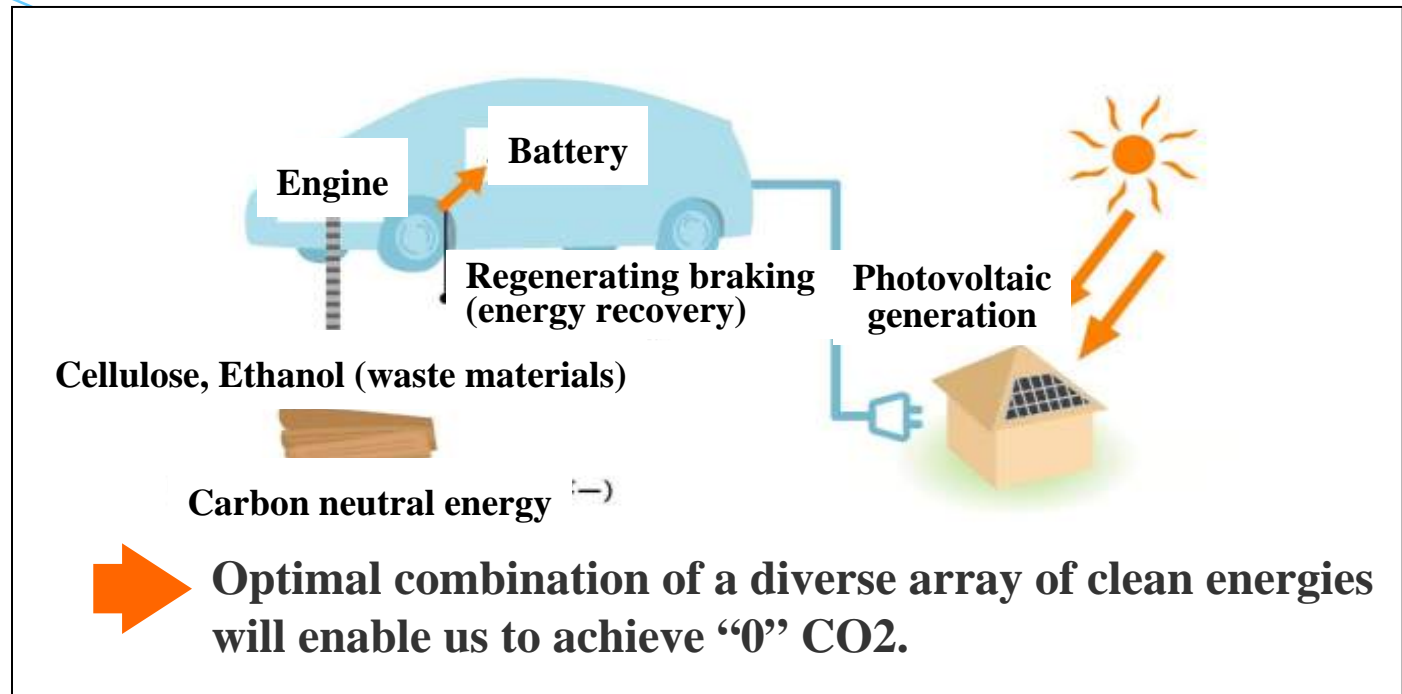
Hydrogen

Energy Diversification

< Alternatives >

- Bio
- Electricity
- Hydrogen

< Image of Plug-in Hybrid usages in the future >



▶ Striving to develop Small Electric Vehicle for mass production.

“R & D”

Development of battery technology

< Development of battery at Toyota >

In 1925, Sakichi Toyoda

encouraged
the development
of a battery.



Lab of Sakichi Toyoda

▶ **Nickel-metal hydride batteries**
(Currently used in hybrid vehicles)

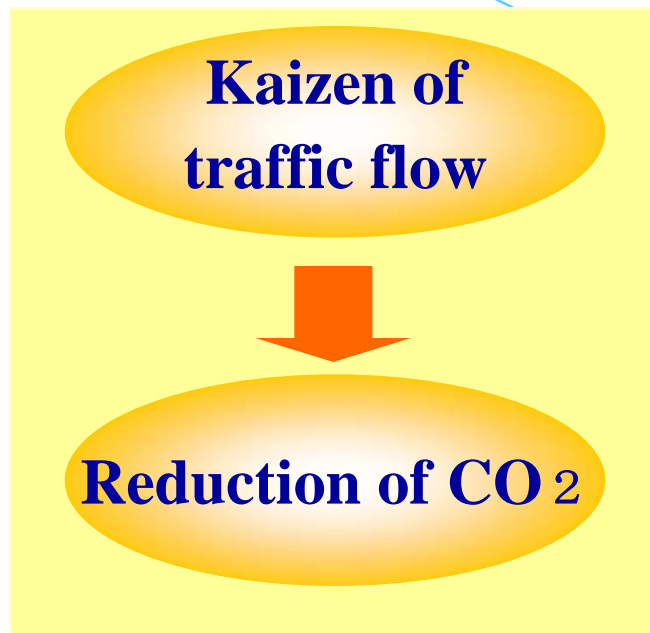
▶ **Lithium-ion battery**
(Effective in PHVs and EVs)

▶ **Strive to develop next-generation batteries**

→ **Establish Battery Research div.**

Innovation in Infrastructure

<Environmentally friendly urban planning>



- ▶ Putting transport infrastructure in place
- ▶ Apply our ITS technologies



Sustainable growth of society and earth

3 sustainabilities

In pursuit sustainability of

▶ **“R & D”**

▶ **“Monozukuri”**

▶ **“Social contribution activities”**

Monozukuri : Literal meaning is production or creation. But it implies more than simply manufacturing products but instead covers a set of activities and processes through production to sales and services, that create added value for customers.

Forth Toyota Environment Action Plan

<From the year ending March 2007 to the year ending March 2011>

< 2010 CO2 Reduction Targets, Results and New Targets >

Region	Items	2010 Target	2007 Result	New 2010 Target
Worldwide	CO2 volume per sales unit	20% reduction from 2001	32% reduction	35% reduction from 2001
Japan (TMC)	CO2 volume per sales unit	35% reduction from 1990	55% reduction	60% reduction from 1990
	Total CO2 volume	20% reduction from 1990	25% reduction	30% reduction from 1990

Sustainable Plant Activities

【Energy Reduction】

① Development and introduction of low CO2-emitting

production technologies and daily kaizen

【Energy Conversion】

② Utilization of renewable energy (solar, etc.)

【Local Community Involvement and

Ecological
Preservation】
③ Tree planting at production plants

～ Green for Tomorrow ～

Sustainable Plant Activities

< Introducing low carbon production technologies >



- Assembly line length reduction more than 40%
- Painting line length reduction Approx. 30%

< Using renewable energies >



< Creating forests around production plants >



▲ **Tree-planting at Tsutsumi Plant on May 18 – 50,000 trees with 5,000 people**

◀ **Solar panels at Ban Pho Plant, Thailand**

- Photovoltaic Generation System ; Output 2,000 kW (Equivalent in area to 500 houses)
- CO2 Emission Reduction Effect ; 740tons/year (Equivalent to 1,500 barrels of crude oil)

Sustainable growth of society and earth

3 sustainabilities

In pursuit sustainability of

- ▶ **“R & D”**
- ▶ **“Monozukuri”**
- ▶ **“Social contribution activities”**

Monozukuri : Literal meaning is production or creation. But it implies more than simply manufacturing products but instead covers a set of activities and processes through production to sales and services, that create added value for customers.

Social Contribution Activities for Realizing a Sustainable Society

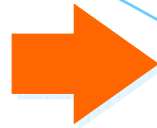
< Toyota's policy for social contribution activities >

▶ Environment

▶ Traffic safety

▶ HR development

▶ Arts, culture and community care



Continually implement measures with strong local ties



Funding of environmental governance center at China's Tsinghua University



Hands-on learning programs through Toyota Shirakawa-Go Eco-Institute

Social Contribution Activities for Realizing a Sustainable Society

< Projects to counter desertification in Fengning Man Autonomous Country, Hebei Province, China >



2001

Before afforestation



2007

After afforestation



**Establishment
of the 21st
Century
Greater Beijing
Afforestation
Center**

Social Contribution Activities for Realizing a Sustainable Society

< Fostering programs for local communities >

Toyota Foundation Activities



In Ritto City, Shiga Prefecture

Toyota Environmental Activities Grant Program



On shore of Lake Victoria, western Kenya

Cars that can go around the world on just one full tank of gas

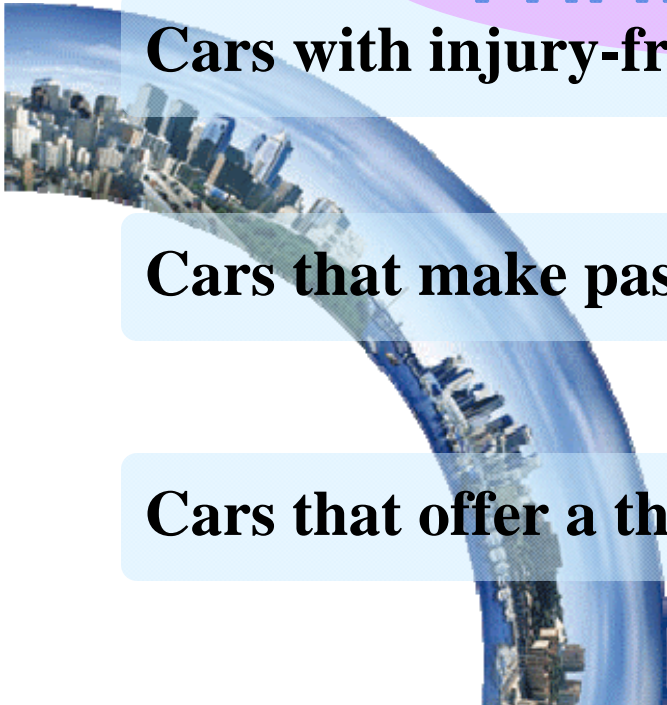
Cars that makes the atmosphere cleaner the more you drive them

Thrilled and Excited

Cars with injury-free designs and accident-avoidance features

Cars that make passengers healthier the longer they ride

Cars that offer a thrilling, emotional and physical driving experience



Sustainable growth of society and earth

**Environment
preservation**

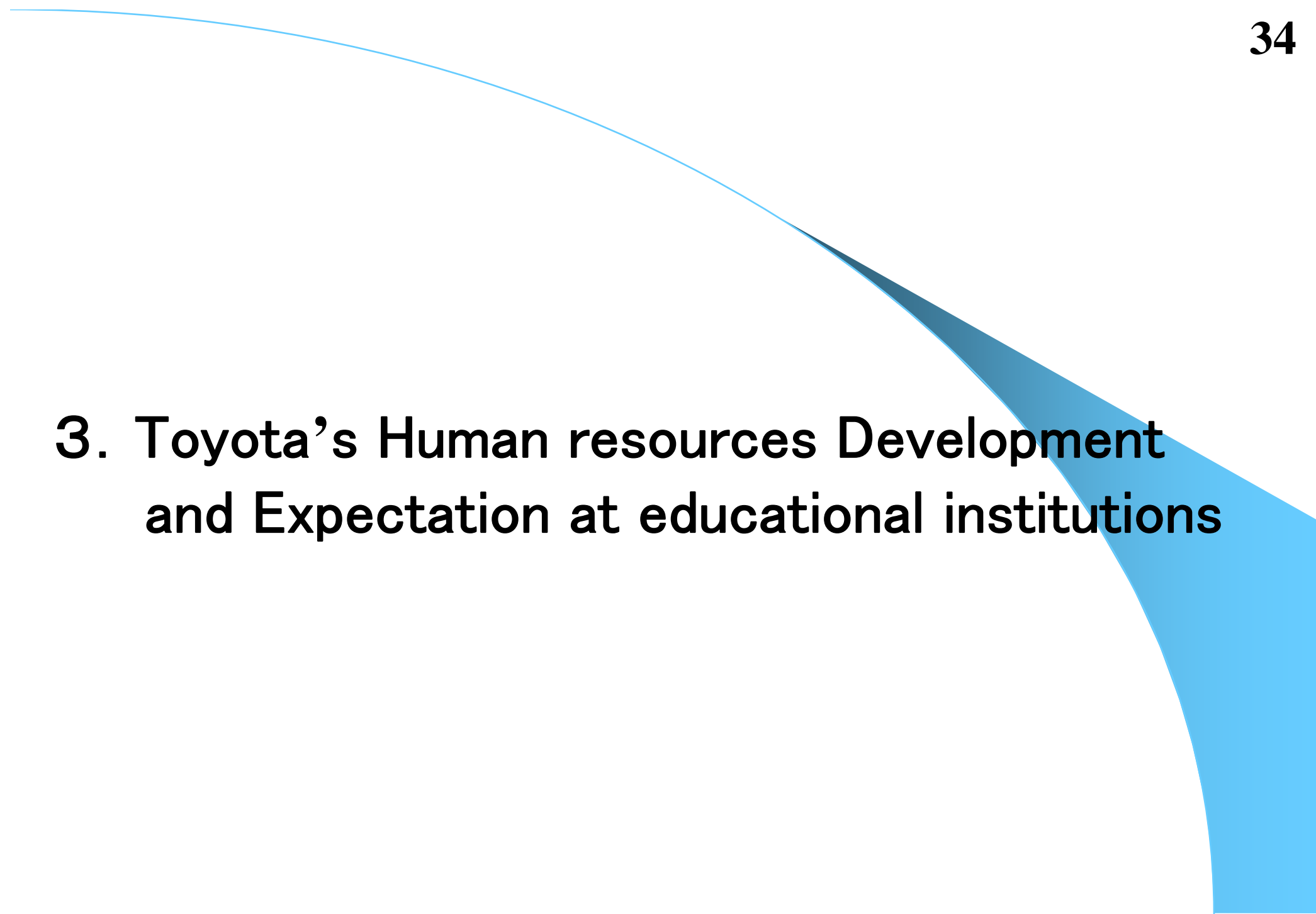
+

**Economic
Growth**

Innovation in technology

People

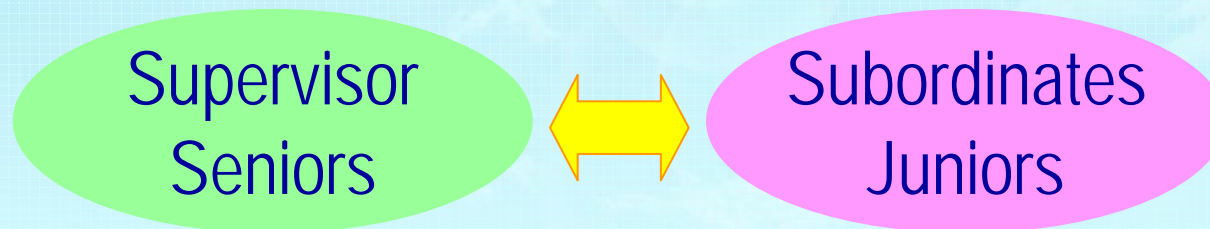
**A
prosperous
low carbon
society**

A decorative blue graphic element consisting of a thin curved line starting from the top left and a larger, darker blue curved shape on the right side that tapers towards the bottom right.

3. Toyota's Human resources Development and Expectation at educational institutions

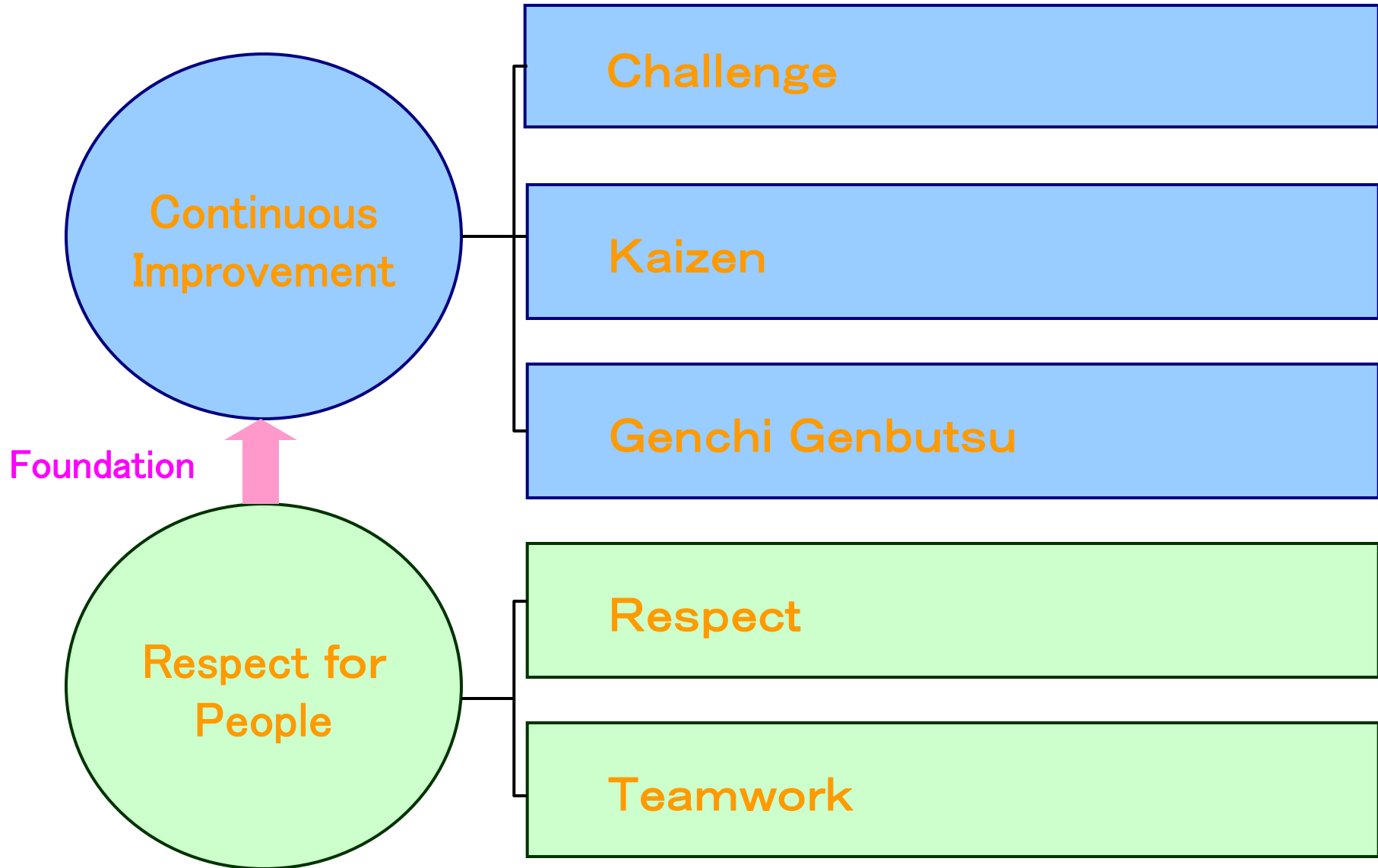
- ◆ People are the foundation of our company management. Human Resource Development is the most essential way to secure the future of the company.

☆ OJT + Off JT is core and the most important approach to developing people
⇒ Developing people thoroughly by Genchi-Genbutsu



Developing people means to practice the Toyota Way, which in turn leads to accomplishment of Company goals.

The Toyota Way



Challenge

Have own vision

- Establish individual and organizational vision
- Know one's own caliber
- Eliminate the gap between current situation and target

Genchi Genbutsu

See Genba sufficiently and ask why repeatedly

- Grasp the real nature not superficial events
- Find out the root cause not potential cause
- Do “steadfastly, sure-footedly and thoroughly”

Kaizen

Identify and visualize problem

- Develop problem identification skill and encourage ourselves to visualize problem.
- Hold healthy sense of crisis, stagnation leads to a decline
- Accept ownership. Do not sit on the sidelines

☆ Develop system, based on 4S or 5S to visualize problem

☆ Top has an “eye for detail, are fussy and persistent”

Respect

**Everyone plays
a leading part**

- Mutual trust, mutual responsibility
- Communication
- Show gratitude for things

Teamwork

**Battle with an open
and friendly mind**

- Accumulation of knowledge and intelligence by diversified members, and adjustment and alignment are the nature of the auto-business
- Trinity, Quatro-nity

☆ Develop flexible organization

- Project team, taskforce formed freely, Obeya activity

<Expected skills and experiences while at school>

- **Experience to solve conflicting issues** Challenge
- **Experience to solve problems by applying structural analysis and lateral thinking skills** Genchi Genbutsu
- **Experience in multiple disciplines** Kaizen
- **Skills to explain complicated issues simply & clearly** Respect
- **Seek out experiences where faced with different opinions and values.**
- **Experience to demonstrate skills both technical and leadership areas** Teamwork

Thank you very much !!