

A scenic view of a river flowing through a lush, green valley with mountains in the background. The river is in the foreground, surrounded by green vegetation and rocks. The background shows a dense forest of green trees on a hillside, with a few buildings visible in the distance.

The Policy for Green Economy Creation in the City of Yokohama

Masato Nobutoki

Director General

Climate Change Policy Headquarters

City of Yokohama

Direction for Green Economy Creation

■ Construction of partnership model between urban areas and rural areas

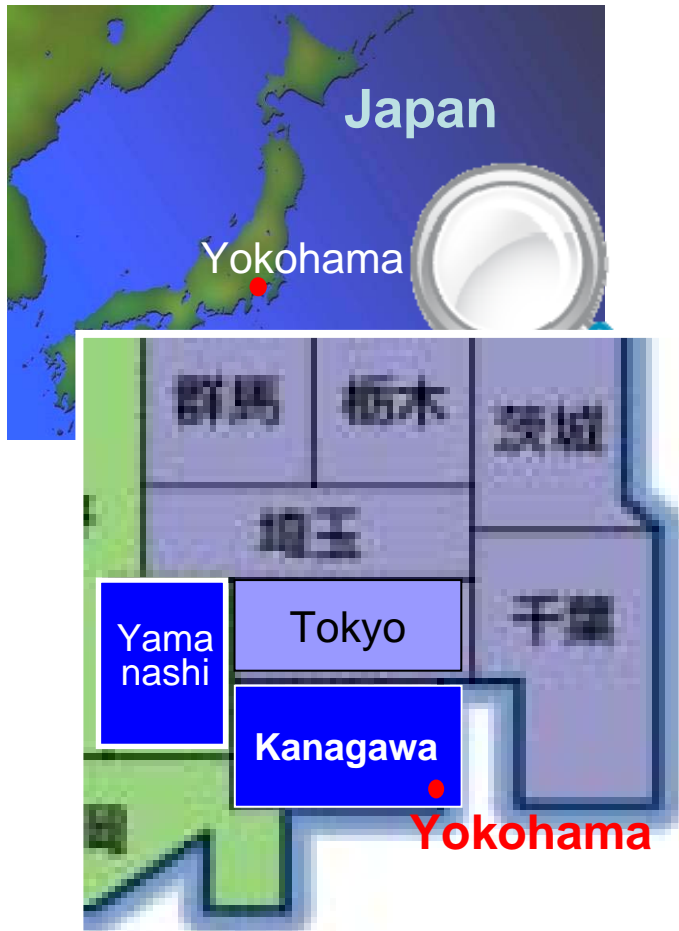
- **Three-Party (Yamanashi Prefecture, Doshi Village, City of Yokohama) Joint Research on Global Warming Countermeasures – example**
- Promotion of exchange between residents of urban areas and rural areas

■ Fusion of the environment with regional economy

- **Promotion of new technologies and new product development by small and medium enterprises (SME) in Yokohama through the Yokohama version of Small Business Innovation Research (SBIR) – example**
- Project to promote “green style” shopping in Yokohama through the establishment of Y-GPN “Yokohama Green Purchasing Network” composed of approximately 70 companies
- Promotion of “Yokohama Green Valley Initiative” through industry-academia-government collaboration to create pioneering areas for renewable energy technologies in coastal areas)
- Promotion of the development of financial products that are environmentally conscious (E.g. The “Yokohama ECO Challenge” deposit fund of Yokohama Shinkin Bank, with a portion of funds being donated to environmental causes)

Construction of Partnership Model between Urban Areas and Rural Areas

~ Three-Party Joint Research on Global Warming Countermeasures ~



Location of prefectures in the vicinity of Yokohama City

Location of Yokohama City in Kanagawa Prefecture and Doshi Village in Yamanashi Prefecture



History of exchange between Yokohama and Doshi Village

1897	Start of water supply from Doshi Village
1916	Purchase of 2,780 hectares of forest located in Doshi Village owned by Yamanashi Prefecture and launch of management of watershed protection forest
1941	Launch of direct management of charcoal production business (continued until 1950)
2003	Creation of “Doshi Water Conservation Forest Volunteer Program”
2004	Conclusion of friendship and exchange agreement between Yokohama and Doshi Village
2008	Launch of “Three-Party Joint Research on Global Warming Countermeasures” between Yokohama, Doshi Village and Yamanashi Prefecture
	Launch of “Yokohama-style Self-reliance School for Young People” program in Doshi Village
2009	150th anniversary of the opening of the port of Yokohama, 120th anniversary of the establishment of Doshi Village

Three-Party Joint Research on Global Warming Countermeasures

First example in Japan of cooperation among prefectures on water conservation forests!

Period of research, number of meeting convened:

From June 18, 2008 to August 2009.
Meetings convened on six occasions.

Research Themes

Theme 1. Launch of projects utilizing woody biomass, etc.

Theme 2. Utilization of carbon offset methods through protection of water conservation forest.

Theme 3. Other related global warming countermeasures.

Partnership Model between Urban Areas and Rural Areas
Construction of a Low-Carbon Society

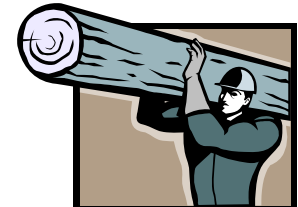
Yamanashi
Prefecture



City of Yokohama



Doshi Village



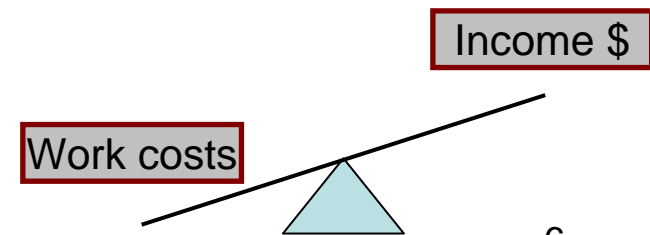
- Revival of forestry industry, creation of new industries
- Stable supply of tree thinning materials and pruning techniques

Theme 1. Launch of projects utilizing woody biomass, etc.

Issues

- As dependence on petroleum for materials and fuel, and dependence on imported lumber are both at high levels, distribution and prices of domestically produced lumber are stagnant.
- There are insufficient forestry business operators.
- Forest owners have abandoned management practices.
- There are few work access roads in forests, so it is difficult to transport lumber.

Even if thinning is implemented, the felled lumber cannot be taken out!



Theme 1. Launch of projects utilizing woody biomass, etc.



Can woody biomass technology be the savior for forest improvement?



Look at what can be accomplished when building a venue out of bamboo!

Hillside Area for Y150 (150th anniversary of the opening of the port of Yokohama) Take no Unabara (Sea of Bamboo)



Brochures made from paper 100% sourced from bamboo

⇒ Towards biomass with greater added value



Ink made from carbon extracted from bamboo

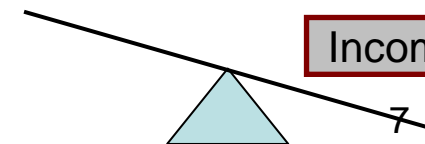


Carbon nano-tubes made from carbon extracted from bamboo



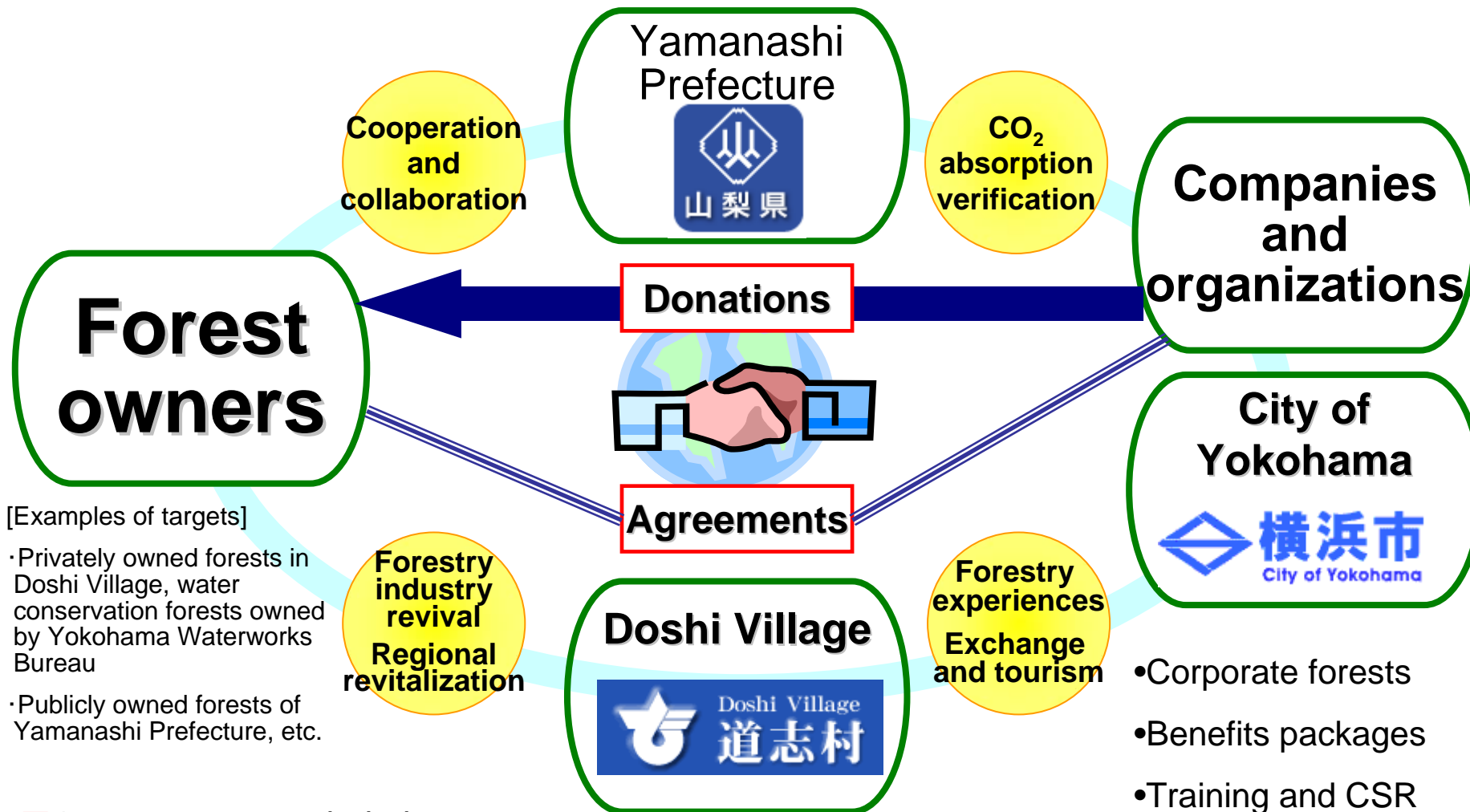
Work costs

Income \$



Theme 2. Utilization of carbon offset methods through protection of water conservation forest

Yamanashi Prefecture: “Verification System for Forest Creation, CO2 Absorption”



[Examples of targets]

- Privately owned forests in Doshi Village, water conservation forests owned by Yokohama Waterworks Bureau
- Publicly owned forests of Yamanashi Prefecture, etc.

■ 1 agreement concluded

■ 2 agreements under consideration (as of October 5, 2009)

- Corporate forests
- Benefits packages
- Training and CSR

Theme 3. Exchange activities involving experience-based events and learning about the environment.



Exchange

Learning

Experience

Tourism



■ ■ Fusion of the Environment with Regional Economy

~Development of biodegradable products through Yokohama version of SBIR~

■ Challenges for plastic products

Made In YOKOHAMA !

- Reduction of CO2 emissions and energy volume usage through product cycle from production to disposal
- As plastic is highly durable it remains a semi-permanent presence in the environment, causing various issues such as ground and water pollution, and causing damage to marine creatures due to plastic floating on the ocean surface

■ What does biodegradable mean?

All living organisms on the planet, including humans, return to the earth once their lives end. Therefore biodegradable refers to the process through which organic materials is broken down into water and CO2 under certain conditions.

■ Effect of plant-derived biodegradable products

- Reduction in CO2 and energy use of around 30%
- Renewable plant resources are used as raw materials, thus reducing petroleum use and enabling decomposition and return to the earth without causing pollution.

⇒ Environmentally friendly products returned to the earth through the power of the natural world

Development of Biodegradable Products (Bio-plastics)

~Environmentally friendly products returned to the earth through the power of the natural world.~

Made In YOKOHAMA !

Photos of decomposition of compost
(80°C)



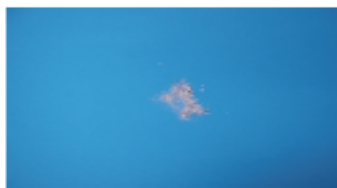
0 days



4 days



8 days



14 days

■ Environmental measures and industry creation

Advanced community technologies created from the “Yokohama Version of SBIR Subsidy System” which aims to promote development of new technologies and products by SMEs in Yokohama City.

PLILA brand name for biodegradable products

Magie Pression Co., Ltd.

Developed products:

Banners and flags, food packaging, apparel items, garments, buttons, etc.

■ Also, through cooperation with the large manufacturers a **biodegradable bottle** is being developed that can be returned to the earth using the power of nature.