

Economic Survey of Environmental Industries (tentative name)

Preliminary Report

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This is a preliminary report of *the Economic Survey of Environmental Industries (tentative name)*. This is our first and trial survey focusing on environmental industries, conducted from 5th to 26th of February, 2010.

Main findings of the survey are;

1. There are quite a number of companies which are expecting the environmental industries as a whole will grow in the next 10 years.
2. The DI (Diffusion Index) within the companies which are in or going into environmental industries is 0. This is relatively good compared with -14, the DI for all the industries except for financial industry (Large Enterprises) of Bank of Japan's Tankan survey (Short-Term Economic Survey of Enterprises in Japan) in March. Especially, the DI's for the business of energy-saving home appliances and environment-friendly cars stand at dozens of positive points, indicating apparently better economic condition in these industries.

(DI = (% of the responses "Good" - (% of the responses "Bad"))

In addition, the Ministry of the Environment estimated the market size of environmental industries. The result shows the market continued to grow to reach approximately 75 trillion yen in 2008.

Later this year (2010), this survey is planned to be conducted periodically to clarify the relationship between the trends of environmental industries and overall economic conditions.

1. About the Survey

(1) Purpose

The purpose of this survey is to promote better understandings and promote broader acknowledgement of the environmental businesses which are expected to lead the future "growth" of our economy.

Prior to its full-scale implementation planned later this year, this trial survey was conducted by a private research firm to examine the methodology and this preliminary report provides the first output on the business conditions of the environmental industries.

(2) Survey Period

February 5 (Friday) to February 23 (Friday), 2010

(3) Sample Companies

2,050 companies (2,000 were randomly chosen out of more than 6,000 companies, including listed companies at the stock exchanges at Tokyo, Nagoya and Osaka and non-listed companies with more than 500 employees. The rest 50 companies were already doing the environmental businesses and added to the sample to enhance the result.)

(4) Valid Number of Responses

486 companies (Valid response rate is 23.7%)

(5) Questions

a) Japan's Environmental Industries as a Whole (present, in 3 years and in 10 years)

1) Business Confidence

2) Promising Environmental Industries which are Expected to Grow

b) Environmental Businesses of the Responded Companies

1) Current and/or Prospective Environmental Businesses (Top 3 industries)

2) Challenges to the Progress of Environmental Industries

3) Desirable Government Supports for the Development of the Industries

4) Judgment survey on the following subjects of business conditions for the up to three industries selected

at 1) in the range of present, in 3 years and in 10 years;

- Business Confidence
- Domestic Supply-Demand Conditions
- Output Price
- Future Plans of R&D
- Future Plans of Spending on Plants and Equipment
- Future Plans of Employment
- Financial Positions
- Expansion of Business Overseas

2. Summary of the Survey Results

(1) Japan's Environmental Industries as a Whole

a) Business Confidence

Present

"Not so good"..... 65.4%

"Good"..... 16.0%

"Bad"..... 15.2%

In 3 years

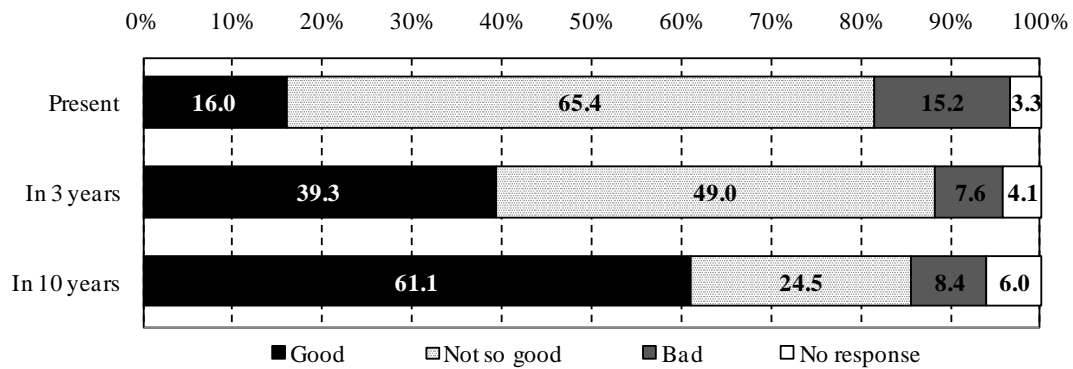
"Good"..... 39.3%

In 10 years

"Good"..... 61.1%

In sum, the environmental industries were expected to grow in the next 10 years.

Figure 1. Business Confidence of Environmental Industries as a Whole



b) Promising Environmental Industries which are Expected to Grow

Present

“Environment-Friendly Cars”	25.7%
“Energy-Saving Home Appliances (eligible for the “eco-points” subsidy)”	23.3%
“Solar power Generation Systems”	17.7%
“Waste Disposal/Recycling”	17.3%

In 3 years

“Environment-Friendly Cars”	34.0%
“Solar Power Generation Systems”	26.3%
“Energy Saving and/or Energy Management ¹ ”	23.7%
“Energy-Saving Home Appliances” (eligible for the “eco-points” subsidy)	3.5%

The percentage of those who chose the last was smaller compared to the present situation, in contrast to the top three industries which gathered higher percentage of responses.

In 10 years

“Environment-Friendly Cars”	21.8%
“Solar Power Generation Systems”	18.5%
“Renewable Energy Facilities”	18.1%
“Energy Saving and/or Energy Management * ¹ ”	15.0%
“Smart Grid”	9.7%

In 10 years, “Environment-Friendly Cars” were expected to grow best followed by “Solar Power Generation systems.” Although the market of “Energy-Saving Home Appliances (eligible for “eco-points” subsidy)” is expanding thanks to the government fiscal support, the low response rate showed limited potential in this area in

¹ Insulating material, fuel cell, LED lighting, energy-saving lighting equipment, high efficiency boiler, gas co-generation system etc. in this survey.

the coming 10 years.

As for “Waste Disposal/Recycling”, the response rate was 7.6% for the next 3 years and 6.8% for the next 10 years. These rates were low compared with 17.3, the response ratio for “Present”, but a moderate growth was expected in the future.

Table 1. Top 5 Thriving and Prospective Environmental Businesses

【Present】

Rank	Category	Number of Response	Response Rate (%)
1	Environment-Friendly Cars	125	25.7
2	Energy Saving Home Appliances (eligible for the "eco-points" subsidy)	113	23.3
3	Solar Power Generation Systems	86	17.7
4	Waste Disposal/Recycling	84	17.3
5	Energy Saving and/or Energy Management	64	13.2
Total		486	100.0

【In 3 years】

Rank	Category	Number of Response	Response Rate (%)
1	Environment-Friendly Cars	165	34.0
2	Solar Power Generation Systems	128	26.3
3	Energy Saving and/or Energy Management	115	23.7
4	Renewable Energy Facilities	54	11.1
5	Waste Disposal/Recycling	37	7.6
Total		486	100.0

【In 10 years】

Rank	Category	Number of Response	Response Rate (%)
1	Environment-Friendly Cars	106	21.8
2	Solar Power Generation Systems	90	18.5
3	Renewable Energy Facilities	88	18.1
4	Energy Saving and/or Energy Management	73	15.0
5	Smart Grid	47	9.7
Total		486	100.0

(notes) based on up to three multiple responses

(2) Environmental Businesses of the Responded Companies

a) Current and/or Prospective Environmental Businesses (Top 3 industries)

The survey showed 52.3% of the companies were in or going into the environmental businesses.

The top category was “Energy Saving and/or Energy Management” (more than 60 companies responded). The next categories were “Solar Power Generation Systems,” followed by “Environmental Load-Reducing and/or

Energy-Saving Products², “Waste Treatment/Recycling” and “Renewable Material,³” gathering more than 30 companies responded.

Figure 2. Companies Doing Environmental Business

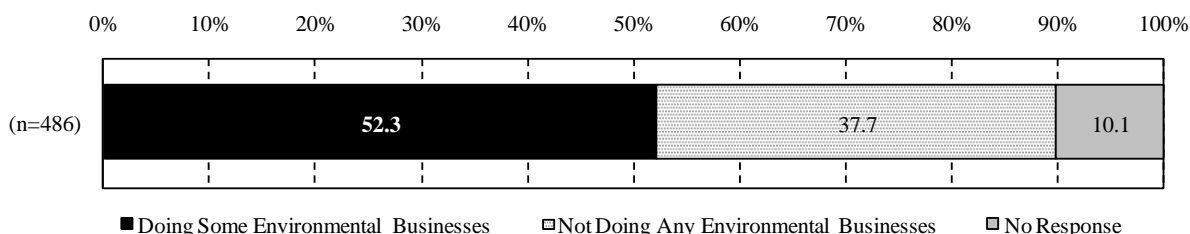


Table 2. Top 5 Present and Future Industries of Environmental Businesses

Rank	Category	Number of Response	Response Rate (%)
1	Energy Saving and/or Energy Management	66	12.2
2	Solar Power Generation Systems	45	8.3
3	Environmental Load-Reducing and/or Energy Saving Products	44	8.1
4	Waste Disposal/Recycling	41	7.6
5	Renewable Materials	37	6.9
Total		540	100.0

(notes) based on up to three multiple responses

b) Judgment Survey of Current and/or Prospective Environmental Businesses

Among the questions on the current and/or prospective environmental businesses, we compared business confidence, domestic supply-demand conditions and output price with the results of the Short-Term Economic Survey of Enterprises in Japan, conducted by Bank of Japan (“Tankan,” hereinafter).

i) Business Confidence

We compared business confidence of “Present” and “in 3 months” of the environmental industries with the results of Tankan of all the industries, based on the Diffusion Index calculated as in Tankan.

The DI (Diffusion Index) is the percent of “Good” minus that of “Bad,” and the DI for the companies which were doing or going into environmental industries is 0. This was relatively good compared with -14, the DI of Tankan in March 2010 for all industries except for financial industry (Large Enterprises). Especially, the DI in the area of energy-saving home appliances and environment-friendly cars gained dozens of positive points, indicating apparently good economic condition.

² Environmental load-reducing paint/adhesive, biomass plastic, sulfur free gas, light oil, DPF (Diesel Particulate Filter), “100 year residence” (A residence to endure more than 100 years) and the products with “eco-mark,” etc.

³ Manufacturing or sales of the re-cycled products from waste material (recyclable resource), and services to deal with the used goods (valuable resource), which are different from waste disposal/recycling.

Figure 3. Business Confidence

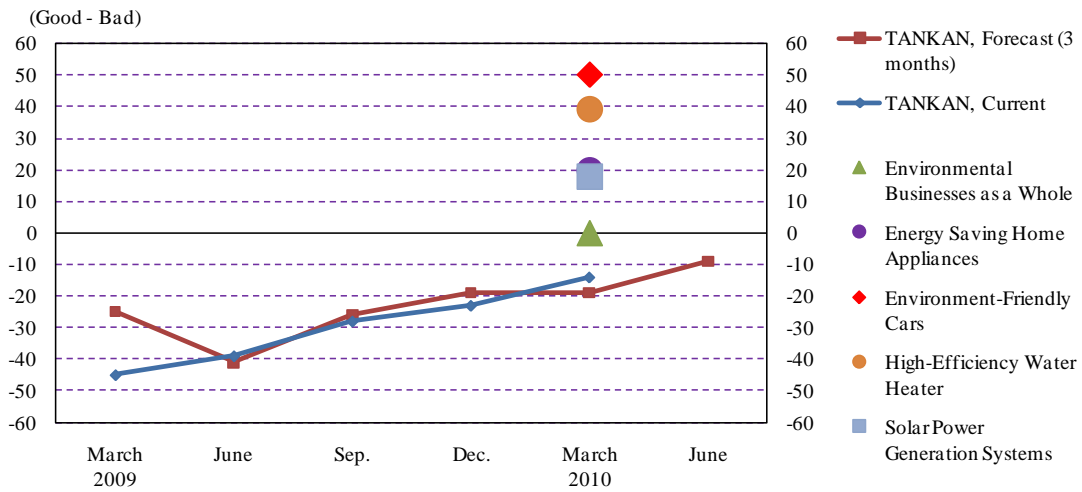


Figure 4. Domestic Supply-Demand Conditions

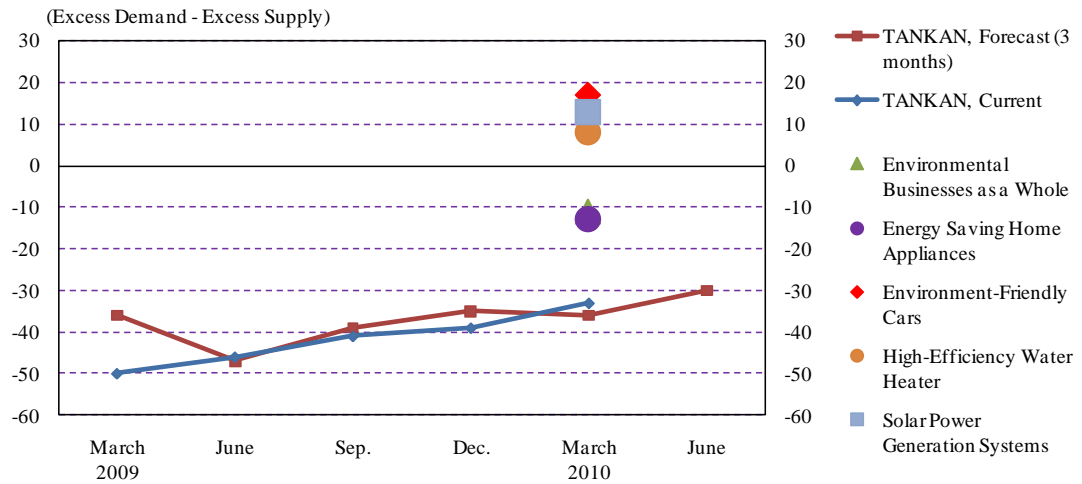
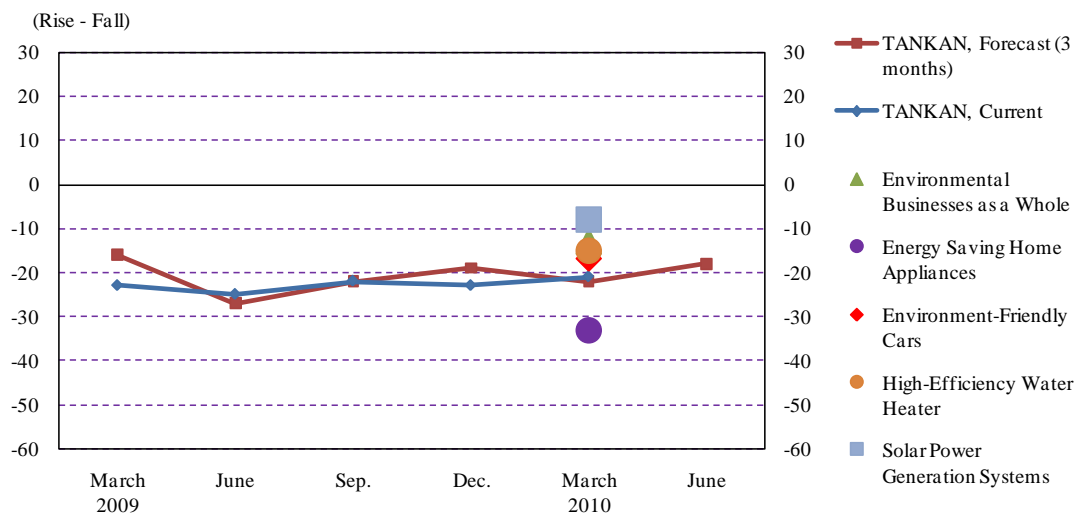


Figure 5. Output Prices



ii) Domestic supply-demand conditions

The DI here is defined as “Excess Demand” minus “Excess Supply.” We compared DI of domestic supply-demand conditions of “Present” and “in 3 months” with those in Tankan. In the entire companies which are doing or planning to do environmental businesses, the DI of domestic supply-demand conditions of each company’s environmental businesses was -11. This negative number implies that the supply was ahead of the demand; however, the gap between the two is smaller when comparing with the result of Tankan, -33.

iii) Output price

For the output price, the DI is the percent of “Rise” minus that of “Fall”. We asked output price “at present” and outlook “in 3 months.” The DI for the entire companies which were doing or planning to do environmental businesses was -13. This was larger than -21, the DI of Tankan in March, meaning that less companies were facing the price drop of their products and services in the environmental businesses.

3. Trend of the Market Size of Environmental Industries in Japan

The market size of the entire environmental industries of our country was approximately 51 trillion yen in 2004 and grew up to 75 trillion yen in 2008. According to the New Growth Strategy of the Japanese government, the market size is expected to grow by 50 trillion yen, reaching 120 trillion yen.

Figure 6. Market Size Output Prices of Environmental Industries in Japan

