

Japanese Companies Become More Proactive on the Environment

— The Nissay Business Conditions Survey (February 2001)

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Introduction

As global warming, industrial waste disposal and other environmental issues grow more prominent worldwide, companies are becoming increasingly sensitized to the environmental impact of business activities and the risk of unexpected losses. Indeed, the environment is shaping up to be one of the most important challenges facing corporate management in the new century.

To examine this trend in greater detail, the latest Nissay Business Conditions Survey (conducted in February jointly by Nippon Life Insurance Company and NLI Research Institute; 3,764 responses received nationwide) focused on the corporate sector's response to environmental issues.

To our surprise, the survey results indicate that as many companies have a positive perception as a negative one regarding the impact of environmental awareness on business. Despite the additional cost, many companies say they are taking environmental measures to fulfill their social responsibility or improve their corporate image. Moreover, approximately half of the companies — including 36 percent who have been asked by companies they do business with to take environmental measures — predict that the choice of business partners will be influenced by environmental considerations.

1. Evenly Balanced Views on Environment's Effect on Business

Asked how the growing emphasis on the environment is impacting business, approximately 40 percent of the companies see no particular effect good or bad. However, the rest are evenly divided between positive and negative views: 28.7 percent see a positive effect, and 27.1 percent a negative effect. The percentage of positive views is surprising; we did not expect so many companies to believe that environmental awareness is creating new business opportunities.

By industry, positive views are most pronounced in general machinery and precision equipment (41.3

percent), electrical machinery (41.6 percent), and specialized services (52.6 percent). On the other hand, negative views prevail in the food (55.7 percent) and restaurant (54.2 percent) industries.

Figure 1 Perceived Effect of Environmental Awareness on Business

(%)

	Positive	Negative	No effect
All industries	28.7	27.1	41.4
Selected industries			
Machinery/precision instruments	41.3	16.0	41.8
Electrical machinery	41.6	16.3	38.9
Specialized services	52.6	2.6	44.7
Foods	14.9	55.7	27.6
Retail	21.4	34.5	40.2
Restaurant	16.7	54.2	22.9
Company size			
Large	38.3	21.8	37.2
2nd tier	34.3	25.1	37.7
Small & medium	25.6	28.4	43.3

Note: Figures may not add up to 100 percent due to incomplete responses.

By company size, 38.3 percent of large companies see a positive effect, compared to only 25.6 percent of small and mid-sized companies. Thus large companies tend to be significantly more positive toward the environment.

2. Top Measures Taken: Conservation in Offices, Industrial Waste Disposal

Of the measures already being implemented, the most common are conservation of energy and resources in offices (32.4 percent), followed by reduction and recycling of industrial waste (27.3 percent), conservation of energy and resources in manufacturing processes (19.3 percent), and ISO 14001 certification (17.9 percent). Relatively few companies mention environment-oriented improvement of distribution efficiency (3.9 percent) and environment-oriented design (7.4 percent).

By industry, energy and resource conservation in offices is most common in retail (44.2 percent) and construction (38.8 percent), while reduction and disposal of industrial waste is common in chemical (42.3 percent) and retail (35.0 percent) industries. Energy and resource conservation in manufacturing processes is common in chemical (46.3 percent) and transport equipment (40.4 percent), while ISO14001 certification is common in electrical machinery (50.7 percent) and transport equipment (37.2 percent). Environment-oriented design and environment-oriented procurement of materials and components are common in construction (14.6 percent and 15.1 percent respectively).

By company size, environmental activity increases with company size. Differences are pronounced particularly in ISO 14001 certification: 41.4 percent of large companies have received certification, compared to only 11.7 percent of small and mid-sized companies.

Figure 2 Environmental Measures Already Being Implemented

(%)

	ISO 14001 certification	Design	Procurement	Energy, resource saving in manuf.	Energy, resource saving in office	Waste reduction, recycling	Efficient distribution	Disclosure
All industries	17.9	7.4	12.2	19.3	32.4	27.3	3.9	1.0
Selected industries								
Chemical	27.4	9.7	11.4	46.3	21.7	42.3	2.9	1.7
Electrical machinery	50.7	11.3	10.0	25.8	26.7	27.1	1.8	4.1
Machinery/precision instru.	31.6	13.8	9.8	28.0	30.7	21.3	2.2	0.9
Transport equipment	37.2	6.4	5.8	40.4	27.6	32.1	1.3	0.0
Construction	14.2	14.6	15.1	12.3	38.8	27.9	1.4	0.5
Warehousing & transport	5.7	4.3	13.0	3.9	33.5	16.1	12.2	0.4
Retail	6.3	6.0	13.1	2.0	44.2	35.0	7.7	1.4
Company size								
Large	41.4	8.8	12.3	21.5	29.9	30.7	5.4	3.4
2nd tier	27.4	9.0	13.8	20.4	32.1	30.4	3.7	0.7
Small & medium	11.7	6.7	11.5	18.7	32.7	25.8	3.8	0.8

Note: Figures do not add up to 100 due to multiple answers.

3. More Companies Look at Environment-Oriented Procurement and Distribution

With regard to measures being considered for implementation, the priorities parallel measures already implemented: reduction and recycling of industrial waste (20.4 percent) and ISO14001 certification (16.0 percent). However, compared to the responses for measures already implemented, there is a notable increase in environment-oriented procurement (13.7 percent), environment-oriented distribution efficiency improvement (12.5 percent), and disclosure of environmental information (5.4 percent).

By industry, environment-oriented procurement is being examined most in electrical equipment (25.8 percent) and chemicals (22.9 percent), while environment-oriented distribution is of interest to transportation and warehousing (20.0 percent), and environmental disclosure to chemicals (10.3 percent).

By company size, large companies tend to show more interest in environmental disclosure (13.0 percent) and environment-oriented design (11.1 percent), while second-tier and small and mid-sized companies are more interested in energy and resource conservation in manufacturing processes (11.5 and 10.5 percent respectively) and reduction and recycling of industrial waste (21.7 and 20.4 percent).

Figure 3 Environmental Measures Under Study

(%)

	ISO 14001 certification	Eco-friendly design	Green procurement	Energy, resource saving in manuf.	Energy, resource saving in office	Waste reduction, recycling	Efficient distribution	Disclosure
All industries	16.0	7.5	13.7	10.4	9.7	20.4	12.5	5.4
Selected industries								
Chemical	24.6	14.9	22.9	15.4	4.0	25.7	12.6	10.3
Electrical machinery	15.4	14.5	25.8	14.9	8.6	23.1	10.4	9.0
Machinery/precision instru.	21.3	15.6	19.1	15.1	7.6	22.2	9.3	7.1
Transport equipment	28.2	6.4	16.0	18.6	11.5	25.6	10.3	4.5
Construction	22.4	11.4	13.2	8.2	6.4	23.7	4.6	5.9
Warehousing & transport	11.7	2.2	9.1	3.0	8.7	13.0	20.0	3.5
Retail	6.8	6.8	8.0	4.3	10.8	18.2	15.7	6.0
Company size								
Large	12.6	11.1	18.4	5.0	9.6	15.7	13.8	13.0
2nd tier	17.8	9.3	16.5	11.5	9.5	21.7	13.1	6.6
Small & medium	15.6	6.4	12.0	10.5	9.8	20.4	12.2	4.2

Note: Figures do not add up to 100 due to multiple responses.

4. 60 Percent Cite Cost Increase as an Issue

Regarding issues encountered in pursuing environmental measures, an overwhelming percentage of companies (63.2 percent) cite cost increases. This is followed by labor shortage (21.3 percent), lack of technology (17.2 percent), difficulty in gaining recognition for efforts (16.2 percent), and lack of awareness among business partners and consumers (13.3 percent).

By industry, cost increase is most cited in food (83.3 percent) and chemical (80.0 percent), while labor shortage is a concern in steel (34.4 percent) and transport equipment (29.5 percent). Lack of technology is most pronounced in steel (29.5 percent) and chemicals (28.6 percent). Difficulty in gaining recognition for efforts is notably high in electric power, gas and water utilities (30.2 percent), and lack of awareness among business partners and consumers is high in retail (21.9 percent).

By company size, large companies are relatively more concerned about cost increase (72.4 percent) and difficulty gaining recognition (20.7 percent). On the other hand, second-tier and small & mid-sized companies are more concerned about labor shortage (19.6 and 22.4 percent respectively) and lack of technology (19.6 and 16.7 percent) than are large companies.

Figure 4 Issues Encountered in Pursuing Environmental Measures

(%)

	Cost	Labor shortage	Technology	Funding	Public's low awareness	Low recognition of efforts	Inadequate govt. role
All industries	63.2	21.3	17.2	5.3	13.3	16.2	6.1
Selected industries							
Steel	70.5	34.4	29.5	6.6	3.3	6.6	1.6
Chemical	80.0	18.3	28.6	4.6	10.9	16.0	4.6
Foods	83.3	18.4	20.7	5.2	18.4	19.0	5.2
Transport equipment	69.2	29.5	25.6	7.7	7.1	12.8	3.8
Retail	66.7	12.3	9.7	5.4	21.9	17.9	6.6
Electric power, gas, water	60.5	23.3	9.3	2.3	14.0	30.2	9.3
Company size							
Large	72.4	16.5	13.0	3.8	13.8	20.7	8.8
2nd tier	66.2	19.6	19.6	4.7	14.2	17.9	6.1
Small & medium	61.0	22.4	16.7	5.7	12.9	15.1	5.8

Note: Figures do not add up to 100 due to multiple responses.

5. Social Responsibility is Primary Motivation

Regarding the reason for engaging in environmental issues, the majority of companies cite their responsibility to society (61.0 percent), followed by improvement of corporate image (33.6 percent), improvement of product competitiveness (16.8 percent), aversion of environment-related business risk (16.4 percent), and requests from business partners (12.9 percent).

By industry, social responsibility is cited most in power, gas & water utilities (79.1 percent) and electrical machinery (72.9 percent). Corporate image improvement is important to utilities (48.8 percent) and textile & apparel (43.2 percent). Steel and furniture & fixtures are characterized by a relatively strong response in aversion of environment-related business risk and long-term cost savings. In addition, demand from business partners is particularly strong in transport equipment (32.7 percent).

Company size is positively correlated with response rates for corporate image improvement, social responsibility, and aversion of environment-related business risk; on the other hand, it is negatively correlated with the response rate for demand from business partners.

Figure 5 Reason for Engaging in Environmental Issues

(%)

	Enhance corporate image	Improve product competitiveness	Client/supplier's request	Social responsibility	Cost-effective in long term	Avert environmental risk	Because competitor did
All industries	33.6	16.8	12.9	61.0	8.2	16.4	1.5
Selected industries							
Textile/apparel	43.2	15.9	6.8	56.8	13.6	9.1	0.0
Steel	16.4	13.1	13.1	62.3	18.0	27.9	0.0
Furniture/fixture	35.0	30.0	5.0	55.0	15.0	35.0	0.0
Electrical machinery	40.3	14.5	20.4	72.9	9.0	17.2	1.8
Transport equipment	35.9	9.0	32.7	68.6	8.3	19.9	0.6
Construction	40.2	25.1	12.8	53.4	5.9	16.0	4.6
Electric power, gas, water	48.8	14.0	0.0	79.1	4.7	20.9	0.0
Company size							
Large	41.0	16.1	8.8	74.3	6.5	20.7	1.1
2nd tier	38.9	17.6	13.0	65.8	8.6	16.3	1.4
Small & medium	30.8	16.6	13.3	57.8	8.3	16.0	1.6

Note: Figures do not add up to 100 due to multiple responses.

6. Environmental Requests from Business Partners: 36 Percent

Asked whether environmental requests have been made by business partners, 36.2 percent answered affirmatively.

By industry, affirmative responses are most frequent in transport equipment (66.0 percent) and electrical machinery (53.8 percent), and least frequent in services (23.3 percent), retail (29.1 percent) and wholesale (33.6 percent).

By company size, more large companies tend to receive such requests than small — 42.1 percent for large companies, compared to only 34.4 percent for small & mid-sized companies.

By region, environmental requests are most common in Koshinetsu/Hokuritsu (45.5 percent) and Tokai (42.5 percent) regions, and least so in Hokkaido (25.3 percent) and Shikoku (27.0 percent).

Figure 6 Occurrence of Environmental Requests from Business Partners

(%)

	Yes	No		Yes	No
All industries	36.2	59.2	Nationwide	36.2	59.2
Mining/oil & coal/glass & ceramics	47.9	49.3	Hokkaido	25.3	70.3
Electrical machinery	53.8	43.0	Tohoku	28.7	65.7
Transport equipment	66.0	32.1	Kanto	37.5	57.9
Wholesale	33.6	61.0	Koshinetsu/Tohoku	45.5	51.6
Retail	29.1	63.8	Tokai	42.5	55.2
Services	23.3	68.1	Kinki	33.9	60.6
Company Size			Chugoku	38.5	55.3
Large	42.1	53.3	Shikoku	27.0	70.4
2nd tier	39.2	56.4	Kyushu	27.4	65.8
Small & medium	34.4	60.9			

Note: Figures may not add up to 100 due to incomplete responses.

7. Half Predict Environment Will Affect Choice of Business Partners

Asked whether environmental factors will play a growing role in the choice of business partners, approximately half agree, including 12.7 percent who agree strongly. Meanwhile, 13.1 percent disagree, of whom 12.1 percent disagree strongly.

By industry, affirmative responses are relatively high in electrical machinery (21.3 percent agree strongly, 47.5 percent agree overall), chemicals (21.1 percent, 44.0 percent), and transport equipment (20.5 percent, 44.2 percent). On the other hand, negative responses are notably high in services (4.0 percent strongly disagree, 18.4 percent disagree overall).

By company size, large companies are more prone than small companies to note the importance of environmental factors in choosing business partners.

Figure 7 Importance of Environmental Factors in Choosing Business Partners

(%)

	Very important	Somewhat	Neutral	Not very	Not at all
All industries	12.7	37.2	33.2	12.1	1.0
Selected industries					
Chemical	21.1	44.0	28.0	4.6	0.6
Electrical machinery	21.3	47.5	23.5	5.4	0.0
Transport equipment	20.5	44.2	25.6	7.7	0.0
Construction	15.5	47.0	24.7	6.4	0.5
Wholesale	8.6	32.9	39.6	13.8	0.5
Retail	11.4	33.9	36.2	12.8	0.3
Services	8.6	24.7	36.2	18.4	4.0
Company size					
Large	15.3	36.0	34.9	9.6	1.5
2nd tier	13.4	40.3	32.4	9.3	0.8
Small & medium	12.1	36.1	33.4	13.5	1.0

Note: Figures do not add up to 100 due to multiple responses.

8. Eco-Business Centers Around Conservation and Recycling

Approximately 60 percent of companies are engaged in some area of eco-business. The leading areas are energy & resource conserving products and equipment (27.8 percent), followed by recycling and reuse of resources (25.6 percent), and anti-pollution products and equipment (20.8 percent).

By industry, electrical machinery (45.2 percent) and nonferrous metal and metal products (36.1 percent) are leaders in energy and resource conserving products and equipment, while chemicals (36.6 percent) and transport equipment (30.1 percent) lead in anti-pollution products and equipment. Transportation & warehousing (15.2 percent) leads in carbon dioxide related technology and equipment, while services (10.9 percent) lead in environment consulting.

By company size, larger companies tend to be more deeply engaged in eco-business; this pattern is especially pronounced in anti-pollution products and equipment, and recycling and reuse of resources.

Figure 8 Participation Rate in Eco-Business

(%)

	Anti-pollution	CO2 related	Energy, resource saving	Recycling	Soil contamination related	Consulting	Eco information	Eco restoration	No answer
All industries	20.8	5.1	27.8	25.6	3.2	2.4	4.4	6.0	40.7
Selected industries									
Nonferrous/metal prod.	29.0	3.6	36.1	24.9	3.0	1.2	1.2	4.7	38.5
Chemical	36.6	5.7	30.3	29.7	5.1	1.7	4.6	6.9	30.9
Electrical machinery	25.3	1.8	45.2	18.1	3.6	1.4	6.3	5.9	30.3
Transport equipment	30.1	7.1	33.3	23.1	3.2	2.6	3.2	5.8	38.5
Construction	17.4	4.6	29.2	31.5	7.3	2.3	3.7	11.4	36.1
Warehousing & transport	12.2	15.2	11.7	17.0	0.0	1.3	3.0	3.9	56.5
Wholesale	16.4	6.3	25.0	23.7	2.3	1.3	5.2	4.0	45.7
Services	8.3	2.0	13.8	15.2	3.2	10.9	7.5	4.6	57.2
Company size									
Large	27.2	8.8	28.4	33.7	5.4	2.7	5.4	8.0	29.1
2nd tier	21.9	5.0	32.0	29.0	3.9	3.1	4.0	6.0	37.2
Small & medium	19.7	4.7	26.1	23.5	2.7	2.1	4.5	5.7	43.3

Nissay Business Conditions Survey

Survey date: February 2001

No. of valid responses: 3,764 companies

1. By company size

	No. of companies	Percentage
Large	261	6.9
2nd tier	980	26.0
Small & medium	2,515	66.8
No answer	8	0.2
Total	3,764	100.0

2. By region

	No. of companies	Percentage
Hokkaido	91	2.4
Tohoku	254	6.7
Kanto	1,046	27.8
Koshinetsu/Hokuriki	341	9.1
Tokai	471	12.5
Kinki	781	20.7
Chugoku	275	7.3
Shikoku	115	3.1
Kyushu	281	7.5
No answer/other	109	2.9
Total	3,764	100.0