

**Survey on Business Sentiment  
of Japanese Corporations in Thailand  
for the 2<sup>nd</sup> Half of 2022**

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# Survey on Business Sentiment of Japanese Corporations in Thailand for the 2<sup>nd</sup> Half of 2022

JCC Economic Survey Team  
Press Release Date: January 31, 2023

Record

## Survey Period

Questionnaire distribution date: November 29, 2022  
Questionnaire submission deadline: December 23, 2022

## Survey Response

Number of questionnaires distributed:  
1,627 JCC member companies  
(excluding 12 governmental organizations)

Number of respondents:  
508 firms

Response rate:  
31.2%

## Remarks

- Due to the small number of firms responding to some questions, it may not be advisable to evaluate the situation by referring only to the response percentage.

## Report of Survey Results

Please refer to the following pages.

Number of Firms		
Industry		No.
Manufacturing	Food	10
	Textile	11
	Chemical	39
	Steel/Non-ferrous metal	38
	General machinery	20
	Electrical/Electronic machinery	44
	Transportation machinery	68
	Others	39
Manufacturing sector total		269
Non-manufacturing	Trading	82
	Retail	10
	Finance/Insurance/Securities	25
	Construction/Civil engineering	26
	Transportation/Communication	27
	Others	69
	Non-manufacturing sector total	
Total		508

# 1. BUSINESS SENTIMENT

## (1) Overview

The business sentiment (DI) is 27 in the first half of 2022, 21 in the second half of 2022 (forecast), and 28 in the first half of 2023 (forecast). The DI forecast for the second half of 2022 (21) continues to be positive following the first half of 2022, even though the DI figure shrinks compared to the first half of 2022. The decrease of DI is influenced by several factors such as surging prices of raw materials and energy, the global inflation, and the declining demand for exports due to the tightening of monetary policies. The DI forecast for the first half of 2023, however, becomes more positive (21→28), as the responding Japanese firms expect favorable economic impact from the increasing number of inbound tourists and the resolution of raw material and parts shortage. (Table 1-1)

(Table 1-1) Business Sentiment

	Past Surveys									Previous Survey			Current Survey			Unit: %
	Results									Result	Forecast		Result	Forecast		
	2017	2018		2019		2020		2021	2021	2022		2022		2023		
	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1		
Improving	50	52	43	27	24	11	54	55	50	45	46	49	48	44		
No Change	34	30	32	28	28	14	16	23	26	36	36	30	25	41		
Deteriorating	16	18	25	46	48	75	30	22	24	19	17	22	27	16		
(Ref.) DI	34	34	18	▲ 19	▲ 24	▲ 64	24	33	26	26	29	27	21	28		

(Note) 1. DI = "Improving" -(minus) "Deteriorating"

2. As the decimals of percentages are rounded off, the total may not equal 100 percent. This also applies to tables below.

(Note) To determine whether business performance is "Improving" or "Deteriorating," business performance in a six-month term is compared with the corresponding previous term. If DI, a deduction balance of "Improving" and "Deteriorating," is positive, it indicates that business performance is improving for the larger number of responding firms; if DI is negative, business performance is deteriorating for the larger number of firms, in comparison to the previous term.

## (2) The first half of 2022 (January - June)

The percentage of firms reporting their business sentiment was "Improving" decreased by 1 point to 49% from the previous term (50%). Similarly, the number of those indicating their business sentiment was "Deteriorating" also decreased by 2 points from the previous term (24%) to 22%. As a result, the Diffusion Index (DI), a deduction balance of "Improving" and "Deteriorating," increased by 1 point from the previous term (26) to 27. (Table 1-1)

Concerning the movement of each industry's DI, despite the DI value for electrical/electronic machinery industry (-7) turning negative, the DI value for the manufacturing sector remained unchanged from the previous term (23) at 23 as a result of the improving business sentiment in several industries. For the non-manufacturing sector, the DI value for construction/civil engineering (23) industry has rebounded to a positive figure. The overall DI for the non-manufacturing sector, therefore, increased by 2 points from the previous term (30) to 32. (Table 1-2)

## (3) The second half of 2022 (July - December) –Forecast

The percentage of firms indicating that their business sentiment is "Improving" decreased by 1 point from the previous term (49%) to 48%, while the percentage of those reporting "Deteriorating" business sentiment increased by 5 points from the previous term (22%) to 27%. As a result, the overall DI is projected to decline by 6 points from the previous term (27) to 21. (Table 1-1)

For the manufacturing sector, since the DI values for many industries have worsened and the figures for some industries such as food (-10) and chemical (-8) industries have become negative, the overall DI forecast for the manufacturing sector, therefore, decreased by 13 points from the previous term (23) to 10. As for the non-manufacturing sector, even though the DI value for retail industry (-10) fell negative, the overall DI forecast

increased by 3 points from the previous term (32) to 35 as the DI values for several other industries have improved. (Table 1-2)

**(4) The first half of 2023 (January - June) –Forecast**

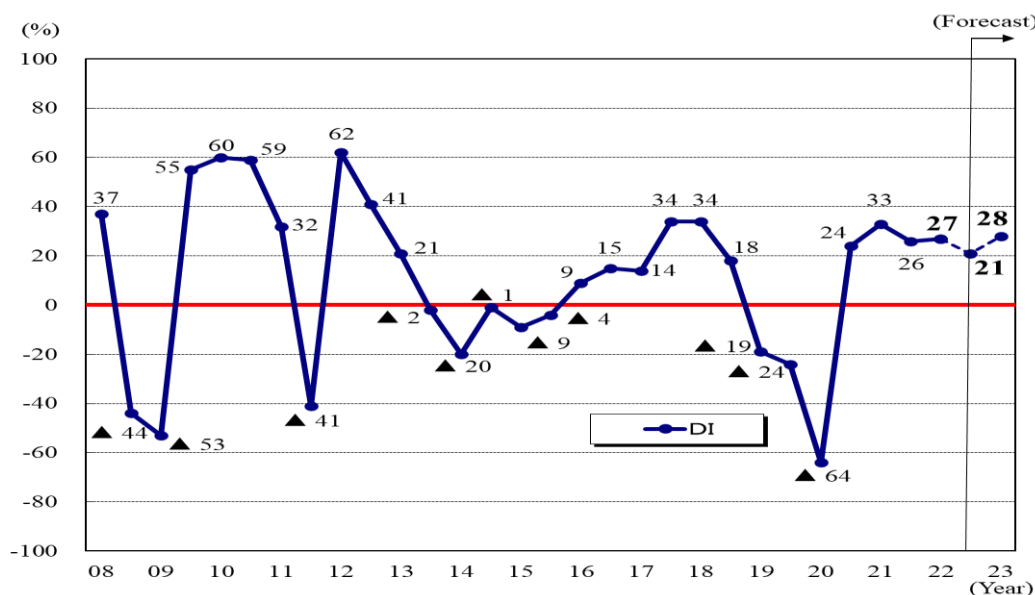
The percentage of firms expecting “Improving” business sentiment decreased by 4 points from the previous term (48%) to 44%, meanwhile the percentage of firms expecting “Deteriorating” sentiment also decreased by 11 points from the previous term (27%) to 16%. Thus, the overall DI forecast rose by 7 points from the previous term (21) to 28. (Table 1-1)

For firms in the manufacturing sector, since the DI values for several industries such as chemical (30) and steel/non-ferrous metal (18) industries have significantly improved, the overall DI is expected to rise by 12 points from the previous term (10) to 22. For the non-manufacturing sector, although the DI value for retail industry (20) has rebounded to a positive figure, the overall DI forecast declined by 1 point from the previous term (35) to 34 since there are also industries whose business sentiment has worsened. (Table 1-2)

(Table 1-2) Business Sentiment (DI) by Industry ("Improving" - "Deteriorating")

Industry	Past Surveys								Current Survey			
	Results						Forecast		Result	Forecast		
	19H1	19H2	20H1	20H2	21H1	21H2	22H1	22H2	22H1	22H2	23H1	
Manufacturing	Food	42	9	▲ 11	9	▲ 22	28	37	9	0	▲ 10	10
	Textile	▲ 31	▲ 22	▲ 82	38	36	8	30	46	55	18	27
	Chemical	▲ 23	▲ 34	▲ 39	51	50	5	29	23	23	▲ 8	30
	Steel/Non-ferrous metal	▲ 22	▲ 47	▲ 92	50	69	31	10	9	21	▲ 8	18
	General machinery	▲ 5	▲ 28	▲ 65	▲ 4	0	▲ 13	14	40	20	40	30
	Electrical/Electronic machinery	▲ 48	▲ 19	▲ 64	41	32	26	2	19	▲ 7	▲ 2	4
	Transportation machinery	▲ 48	▲ 68	▲ 99	64	75	35	16	27	29	32	31
	Others	▲ 33	▲ 37	▲ 49	4	26	21	28	26	44	5	18
	Manufacturing sector total	▲ 31	▲ 39	▲ 66	39	43	23	18	23	23	10	22
Non-manufacturing	Trading	▲ 21	▲ 16	▲ 66	21	50	40	41	33	45	34	31
	Retail	34	▲ 37	▲ 39	▲ 12	28	90	20	60	20	▲ 10	20
	Finance/Insurance/Securities	7	▲ 14	▲ 57	▲ 21	25	29	18	26	36	48	40
	Construction/Civil engineering	0	8	▲ 61	▲ 40	▲ 33	▲ 11	50	47	23	35	50
	Transportation/Communication	▲ 23	▲ 28	▲ 62	45	31	65	8	9	30	3	4
	Others	10	10	▲ 60	▲ 15	0	9	37	43	22	49	42
	Non-manufacturing sector total	▲ 6	▲ 8	▲ 61	3	21	30	34	34	32	35	34
<b>Total</b>	▲ 19	▲ 24	▲ 64	24	33	26	26	29	27	21	28	

(Figure 1) Historical Change of DI According to the Surveys on Business Sentiment of Japanese Corporations



(Note) Diffusion Index (DI) = Business sentiment is “Improving” – “Deteriorating” (compared to the previous term)

## 2. SALES

Regarding the total sales forecast for fiscal year 2022, the percentage of firms anticipating sales “Increase” declined by 7 points from the previous fiscal year (71%) to 64% and the percentage of firms anticipating “More than 20% increase” in their total sales also decreased by 14 points to 17%, compared to the previous fiscal year (31%). (Table 2-1, 2-2)

Regarding the total sales forecast for 2023, the percentage of firms anticipating sales “Increase” shrank by 5 points from the previous year (64%) to 59% and the percentage of firms anticipating “More than 20% increase” also decreased by 8 points to 9%, compared to the previous year (17%). (Table 2-1, 2-3)

(Table 2-1) Change in Total Sales

	Past Surveys						Previous Survey		Current Survey	
	Results						Result	Forecast	Forecast	
	15	16	17	18	19	20	21	22	22	23
Fiscal year										
Sales increase	45	54	65	62	31	22	71	69	64	59
More than 20% increase	13	15	14	11	5	6	31	15	17	9

Unit: %

(Note) Fiscal year is based on each corporation's financial year.

(Table 2-2) Total Sales Forecast for Fiscal Year 2022

Industry		Increase			No change	Decrease				
		> 20%	10-20%	< 10%		< 10%	10-20%	> 20%		
Manufacturing	Food	7 (70)	1 (10)	3 (30)	3 (30)	2 (20)	1 (10)	1 (10)	0 (0)	0 (0)
	Textile	8 (73)	5 (45)	1 (9)	2 (18)	1 (9)	2 (18)	1 (9)	1 (9)	0 (0)
	Chemical	25 (64)	4 (10)	12 (31)	9 (23)	4 (10)	10 (26)	5 (13)	4 (10)	1 (3)
	Steel/Non-ferrous metal	24 (65)	6 (16)	9 (24)	9 (24)	5 (14)	8 (22)	3 (8)	3 (8)	2 (5)
	General machinery	11 (61)	3 (17)	4 (22)	4 (22)	3 (17)	4 (22)	2 (11)	2 (11)	0 (0)
	Electrical/Electronic machinery	26 (59)	5 (11)	7 (16)	14 (32)	6 (14)	12 (27)	3 (7)	6 (14)	3 (7)
	Transportation machinery	49 (72)	9 (13)	16 (24)	24 (35)	7 (10)	12 (18)	7 (10)	4 (6)	1 (1)
	Others	28 (72)	5 (13)	10 (26)	13 (33)	3 (8)	8 (21)	4 (10)	3 (8)	1 (3)
Manufacturing sector total		178 (67)	38 (14)	62 (23)	78 (29)	31 (12)	57 (21)	26 (10)	23 (9)	8 (3)
Non-manufacturing	Trading	60 (74)	18 (22)	22 (27)	20 (25)	10 (12)	11 (14)	4 (5)	5 (6)	2 (2)
	Retail	4 (44)	2 (22)	2 (22)	0 (0)	2 (22)	3 (33)	2 (22)	1 (11)	0 (0)
	Finance/Insurance/Securities	12 (57)	2 (10)	6 (29)	4 (19)	4 (19)	5 (24)	4 (19)	1 (5)	0 (0)
	Construction/Civil engineering	12 (46)	7 (27)	3 (12)	2 (8)	7 (27)	7 (27)	0 (0)	2 (8)	5 (19)
	Transportation/Communication	18 (67)	6 (22)	7 (26)	5 (19)	3 (11)	6 (22)	3 (11)	2 (7)	1 (4)
	Others	35 (53)	13 (20)	12 (18)	10 (15)	23 (35)	8 (12)	3 (5)	2 (3)	3 (5)
	Non-manufacturing sector total		141 (61)	48 (21)	52 (23)	41 (18)	49 (21)	40 (17)	16 (7)	13 (6)
Total		319 (64)	86 (17)	114 (23)	119 (24)	80 (16)	97 (20)	42 (8)	36 (7)	19 (4)

Unit: No. of firms and (%)

(Table 2-3) Total Sales Forecast for Fiscal Year 2023

Industry		Increase			No change	Decrease				
		> 20%	10-20%	< 10%		< 10%	10-20%	> 20%		
Manufacturing	Food	5 (50)	0 (0)	1 (10)	4 (40)	2 (20)	3 (30)	2 (20)	0 (0)	1 (10)
	Textile	8 (73)	0 (0)	0 (0)	8 (73)	2 (18)	1 (9)	1 (9)	0 (0)	0 (0)
	Chemical	22 (56)	2 (5)	8 (21)	12 (31)	12 (31)	5 (13)	4 (10)	1 (3)	0 (0)
	Steel/Non-ferrous metal	17 (46)	1 (3)	3 (8)	13 (35)	17 (46)	3 (8)	2 (5)	0 (0)	1 (3)
	General machinery	10 (56)	1 (6)	5 (28)	4 (22)	4 (22)	4 (22)	2 (11)	1 (6)	1 (6)
	Electrical/Electronic machinery	24 (55)	5 (11)	5 (11)	14 (32)	7 (16)	13 (30)	7 (16)	6 (14)	0 (0)
	Transportation machinery	45 (67)	4 (6)	15 (22)	26 (39)	12 (18)	10 (15)	7 (10)	2 (3)	1 (1)
	Others	20 (56)	1 (3)	7 (19)	12 (33)	6 (17)	10 (28)	8 (22)	2 (6)	0 (0)
Manufacturing sector total		151 (58)	14 (5)	44 (17)	93 (35)	62 (24)	49 (19)	33 (13)	12 (5)	4 (2)
Non-manufacturing	Trading	44 (55)	6 (8)	16 (20)	22 (28)	27 (34)	9 (11)	5 (6)	3 (4)	1 (1)
	Retail	4 (44)	0 (0)	2 (22)	2 (22)	4 (44)	1 (11)	1 (11)	0 (0)	0 (0)
	Finance/Insurance/Securities	13 (62)	1 (5)	4 (19)	8 (38)	5 (24)	3 (14)	2 (10)	1 (5)	0 (0)
	Construction/Civil engineering	17 (68)	7 (28)	4 (16)	6 (24)	5 (20)	3 (12)	0 (0)	3 (12)	0 (0)
	Transportation/Communication	13 (50)	3 (12)	5 (19)	5 (19)	5 (19)	8 (31)	3 (12)	1 (4)	4 (15)
	Others	46 (70)	11 (17)	14 (21)	21 (32)	15 (23)	5 (8)	2 (3)	2 (3)	1 (2)
	Non-manufacturing sector total		137 (60)	28 (12)	45 (20)	64 (28)	61 (27)	29 (13)	13 (6)	10 (4)
Total		288 (59)	42 (9)	89 (18)	157 (32)	123 (25)	78 (16)	46 (9)	22 (4)	10 (2)

Unit: No. of firms and (%)

### 3. PRE-TAX PROFIT/LOSS

Regarding the pre-tax profit/loss forecast for fiscal year 2022, the percentage of firms anticipating “Profit” is 79%. Additionally, firms expecting an “Increase” in their pre-tax profit (including cases of diminishing loss and account balance due to vanishing loss) accounted for 47%, while 32% anticipated a profit “Decrease”. (Table 3-1)

As for the projection for fiscal year 2023, 84% of the respondents anticipated “Profit” and those anticipating an “Increase” in their pre-tax profit amounted to 37%, whereas 27% anticipated a “Decrease” in profit. (Table 3-2)

(Table 3-1) Forecast of Pre-Tax Profit/Loss for 2022 (Year-to-Year Comparison)

Unit: No. of firms and (%)

Industry		Profit	Balance	Loss	Total	Increase in profit	No change in profit	Decrease in profit
Manufacturing	Food	8 (80)	0 (0)	2 (20)	10	5 (50)	0 (0)	5 (50)
	Textile	9 (82)	1 (9)	1 (9)	11	7 (64)	1 (9)	3 (27)
	Chemical	31 (79)	1 (3)	7 (18)	39	14 (36)	7 (18)	18 (46)
	Steel/Non-ferrous metal	30 (81)	4 (11)	3 (8)	37	13 (35)	9 (24)	15 (41)
	General machinery	15 (83)	1 (6)	2 (11)	18	9 (50)	2 (11)	7 (39)
	Electrical/Electronic machinery	36 (84)	3 (7)	4 (9)	43	16 (37)	8 (19)	19 (44)
	Transportation machinery	60 (88)	4 (6)	4 (6)	68	27 (40)	12 (18)	29 (43)
	Others	29 (76)	4 (11)	5 (13)	38	20 (53)	5 (13)	13 (34)
	<b>Manufacturing sector total</b>	<b>218 (83)</b>	<b>18 (7)</b>	<b>28 (11)</b>	<b>264</b>	<b>111 (42)</b>	<b>44 (17)</b>	<b>109 (41)</b>
Non-manufacturing	Trading	64 (80)	2 (3)	14 (18)	80	49 (61)	18 (23)	13 (16)
	Retail	7 (78)	2 (22)	0 (0)	9	4 (44)	2 (22)	3 (33)
	Finance/Insurance/Securities	15 (71)	1 (5)	5 (24)	21	6 (29)	6 (29)	9 (43)
	Construction/Civil engineering	9 (36)	4 (16)	12 (48)	25	13 (52)	7 (28)	5 (20)
	Transportation/Communication	25 (93)	1 (4)	1 (4)	27	14 (52)	4 (15)	9 (33)
	Others	51 (77)	4 (6)	11 (17)	66	33 (50)	23 (35)	10 (15)
	<b>Non-manufacturing sector total</b>	<b>171 (75)</b>	<b>14 (6)</b>	<b>43 (19)</b>	<b>228</b>	<b>119 (52)</b>	<b>60 (26)</b>	<b>49 (21)</b>
<b>Total</b>	<b>389 (79)</b>	<b>32 (7)</b>	<b>71 (14)</b>	<b>492</b>	<b>230 (47)</b>	<b>104 (21)</b>	<b>158 (32)</b>	

(Note) 1. "Increase" indicates either expanding profit, turning a profit, diminishing loss, or achieving account balance due to vanishing loss.

2. "No change" indicates that a business remains at the same level whether they were in the black, at the break-even point, or in the red.

3. "Decrease" indicates either diminishing profit, falling into the red, expanding loss, or falling to account balance due to vanishing profit.

(Table 3-2) Forecast of Pre-Tax Profit/Loss for 2023 (Year-to-Year Comparison)

Unit: No. of firms and (%)

Industry		Profit	Balance	Loss	Total	Increase in profit	No change in profit	Decrease in profit
Manufacturing	Food	8 (80)	0 (0)	2 (20)	10	3 (30)	4 (40)	3 (30)
	Textile	11 (100)	0 (0)	0 (0)	11	6 (55)	5 (45)	0 (0)
	Chemical	33 (85)	3 (8)	3 (8)	39	19 (49)	10 (26)	10 (26)
	Steel/Non-ferrous metal	33 (89)	3 (8)	1 (3)	37	7 (19)	15 (41)	15 (41)
	General machinery	18 (100)	0 (0)	0 (0)	18	8 (44)	6 (33)	4 (22)
	Electrical/Electronic machinery	34 (79)	4 (9)	5 (12)	43	9 (21)	17 (40)	17 (40)
	Transportation machinery	61 (90)	3 (4)	4 (6)	68	19 (28)	32 (47)	17 (25)
	Others	33 (85)	2 (5)	4 (10)	39	14 (36)	8 (21)	17 (44)
	<b>Manufacturing sector total</b>	<b>231 (87)</b>	<b>15 (6)</b>	<b>19 (7)</b>	<b>265</b>	<b>85 (32)</b>	<b>97 (37)</b>	<b>83 (31)</b>
Non-manufacturing	Trading	67 (84)	5 (6)	8 (10)	80	29 (36)	29 (36)	22 (28)
	Retail	8 (89)	1 (11)	0 (0)	9	3 (33)	6 (67)	0 (0)
	Finance/Insurance/Securities	14 (67)	2 (10)	5 (24)	21	8 (38)	8 (38)	5 (24)
	Construction/Civil engineering	13 (52)	4 (16)	8 (32)	25	15 (60)	7 (28)	3 (12)
	Transportation/Communication	26 (96)	0 (0)	1 (4)	27	8 (30)	8 (30)	11 (41)
	Others	54 (83)	5 (8)	6 (9)	65	32 (49)	26 (40)	7 (11)
	<b>Non-manufacturing sector total</b>	<b>182 (80)</b>	<b>17 (7)</b>	<b>28 (12)</b>	<b>227</b>	<b>95 (42)</b>	<b>84 (37)</b>	<b>48 (21)</b>
<b>Total</b>	<b>413 (84)</b>	<b>32 (7)</b>	<b>47 (10)</b>	<b>492</b>	<b>180 (37)</b>	<b>181 (37)</b>	<b>131 (27)</b>	

(Note) Same as Table 3-1

#### 4. CAPITAL INVESTMENT (MANUFACTURING SECTOR)

The amount of capital investment (manufacturing sector) planned for 2023 is expected to increase by 0.8%, compared to 2022 (the total number of firms responding was 258). 31% of these firms anticipated an “Increase” in their capital investment, while 16% anticipated a “Decrease”. (Table 4-1)

Regarding the details of the investment, “Replacement” is the predominant form of capital investment in both 2022 and 2023. (Table 4-2, 4-3)

(Table 4-1) Capital Investment Plan for 2022 and 2023 (Manufacturing Sector)

Unit: Million Baht, %, No. of firms, and (%)

Industry	2022	2023		No. of firms				
	Amount	Amount	Increase rate	Increase	No change	Decrease	Undecided	Total
Food	859	1,201	39.8	3 (33)	4 (44)	1 (11)	1 (11)	9
Textile	2,085	1,405	▲ 32.6	2 (20)	6 (60)	1 (10)	1 (10)	10
Chemical	10,250	19,247	87.8	12 (31)	18 (46)	8 (21)	1 (3)	39
Steel/Non-ferrous metal	3,097	3,211	3.7	14 (38)	13 (35)	7 (19)	3 (8)	37
General machinery	3,251	1,511	▲ 53.5	6 (35)	10 (59)	0 (0)	1 (6)	17
Electrical/Electronic machinery	12,316	12,426	0.9	12 (29)	14 (34)	10 (24)	5 (12)	41
Transportation machinery	35,255	26,495	▲ 24.8	18 (27)	34 (51)	11 (16)	4 (6)	67
Others	3,132	5,323	70.0	12 (32)	19 (50)	3 (8)	4 (11)	38
Manufacturing sector total	70,244	70,819	0.8	79 (31)	118 (46)	41 (16)	20 (8)	258

(Note) Figures above only demonstrate the totals of the data collected from firms that responded to the questionnaire for both 2022 and 2023. Therefore, the amount of capital investment above does not reflect investment by Japanese firms as a whole. Figures above also do not include firms that had just expanded to Thailand.

(Table 4-2) Details of the Capital Investment in 2022 (Multiple Answers)

Unit: No. of firms and (%)

Industry	New	Expansion	Replacement	Streamlining	Others	Total	No. of firms
Food	2 (25)	2 (25)	8 (100)	3 (38)	0 (0)	15	8
Textile	0 (0)	1 (11)	7 (78)	3 (33)	0 (0)	11	9
Chemical	8 (22)	2 (6)	28 (78)	6 (17)	3 (8)	47	36
Steel/Non-ferrous metal	7 (19)	8 (22)	27 (75)	10 (28)	4 (11)	56	36
General machinery	6 (38)	2 (13)	13 (81)	6 (38)	0 (0)	27	16
Electrical/Electronic machinery	13 (34)	14 (37)	31 (82)	11 (29)	0 (0)	69	38
Transportation machinery	30 (46)	7 (11)	42 (65)	21 (32)	4 (6)	104	65
Others	6 (19)	7 (22)	16 (50)	16 (50)	4 (13)	49	32
Manufacturing sector total	72 (30)	43 (18)	172 (72)	76 (32)	15 (6)	378	240

(Table 4-3) Details of the Capital Investment in 2023 (Multiple Answers)

Unit: No. of firms and (%)

Industry	New	Expansion	Replacement	Streamlining	Others	Total	No. of firms
Food	2 (25)	2 (25)	7 (88)	3 (38)	0 (0)	14	8
Textile	0 (0)	2 (22)	7 (78)	3 (33)	0 (0)	12	9
Chemical	13 (36)	4 (11)	25 (69)	5 (14)	3 (8)	50	36
Steel/Non-ferrous metal	8 (22)	6 (17)	28 (78)	7 (19)	3 (8)	52	36
General machinery	7 (47)	3 (20)	12 (80)	6 (40)	0 (0)	28	15
Electrical/Electronic machinery	15 (38)	10 (26)	32 (82)	12 (31)	0 (0)	69	39
Transportation machinery	30 (46)	7 (11)	44 (68)	23 (35)	5 (8)	109	65
Others	7 (21)	5 (15)	19 (58)	16 (48)	3 (9)	50	33
Manufacturing sector total	82 (34)	39 (16)	174 (72)	75 (31)	14 (6)	384	241

## 5. EXPORT TREND

The percentage of firms anticipating an “Increase” in exports in the second half of 2022 (in comparison to the same period of the previous year) is 33%, higher than the percentage of firms expecting a “Decrease” (17%) by 16 points. Similar to the projection for exports in the first half of 2023, the percentage of firms anticipating an “Increase” (35%) is higher than those anticipating a “Decrease” (14%) by 21 points. Meanwhile, the number of firms expecting an “Increase” in the 2022 full-year exports accounted for 36%, exceeding those anticipating a “Decrease” (14%) by 22 points. (Table 5-1, 5-2, 5-3)

(Table 5-1) Export Trend in 2022 (Second Half)

Industry	Unit: No. of firms and (%)									
	Increase			No change	Decrease			No. of firms		
	> 20%	10-20%	< 10%		< 10%	10-20%	> 20%			
Food	4 (44)	0 (0)	2 (22)	2 (22)	5 (56)	0 (0)	0 (0)	0 (0)	0 (0)	9
Textile	6 (60)	2 (20)	3 (30)	1 (10)	1 (10)	3 (30)	1 (10)	1 (10)	1 (10)	10
Chemical	8 (23)	1 (3)	2 (6)	5 (14)	18 (51)	9 (26)	5 (14)	3 (9)	1 (3)	35
Steel/Non-ferrous metal	3 (10)	1 (3)	1 (3)	1 (3)	22 (71)	6 (19)	3 (10)	2 (6)	1 (3)	31
General machinery	6 (40)	2 (13)	1 (7)	3 (20)	5 (33)	4 (27)	0 (0)	3 (20)	1 (7)	15
Electrical/Electronic machinery	14 (41)	2 (6)	5 (15)	7 (21)	11 (32)	9 (26)	2 (6)	5 (15)	2 (6)	34
Transportation machinery	23 (38)	6 (10)	6 (10)	11 (18)	30 (49)	8 (13)	3 (5)	2 (3)	3 (5)	61
Others	15 (42)	5 (14)	4 (11)	6 (17)	15 (42)	6 (17)	2 (6)	3 (8)	1 (3)	36
Manufacturing sector total	79 (34)	19 (8)	24 (10)	36 (16)	107 (46)	45 (19)	16 (7)	19 (8)	10 (4)	231
Trading	24 (32)	5 (7)	10 (14)	9 (12)	41 (55)	9 (12)	3 (4)	3 (4)	3 (4)	74
Retail	1 (25)	0 (0)	1 (25)	0 (0)	3 (75)	0 (0)	0 (0)	0 (0)	0 (0)	4
Construction/Civil engineering	0 (0)	0 (0)	0 (0)	0 (0)	4 (100)	0 (0)	0 (0)	0 (0)	0 (0)	4
Others	4 (29)	3 (21)	1 (7)	0 (0)	10 (71)	0 (0)	0 (0)	0 (0)	0 (0)	14
Non-manufacturing sector total	29 (30)	8 (8)	12 (13)	9 (9)	58 (60)	9 (9)	3 (3)	3 (3)	3 (3)	96
Total	108 (33)	27 (8)	36 (11)	45 (14)	165 (50)	54 (17)	19 (6)	22 (7)	13 (4)	327

(Table 5-2) Export Trend in 2022 (Full Year)

Industry	Unit: No. of firms and (%)									
	Increase			No change	Decrease			No. of firms		
	> 20%	10-20%	< 10%		< 10%	10-20%	> 20%			
Food	5 (56)	1 (11)	2 (22)	2 (22)	3 (33)	1 (11)	1 (11)	0 (0)	0 (0)	9
Textile	6 (60)	3 (30)	2 (20)	1 (10)	1 (10)	3 (30)	1 (10)	1 (10)	1 (10)	10
Chemical	9 (26)	2 (6)	4 (11)	3 (9)	17 (49)	9 (26)	5 (14)	3 (9)	1 (3)	35
Steel/Non-ferrous metal	5 (16)	1 (3)	3 (10)	1 (3)	21 (68)	5 (16)	4 (13)	1 (3)	0 (0)	31
General machinery	7 (47)	2 (13)	1 (7)	4 (27)	6 (40)	2 (13)	0 (0)	2 (13)	0 (0)	15
Electrical/Electronic machinery	14 (41)	2 (6)	5 (15)	7 (21)	13 (38)	7 (21)	2 (6)	2 (6)	3 (9)	34
Transportation machinery	18 (31)	3 (5)	5 (8)	10 (17)	33 (56)	8 (14)	3 (5)	4 (7)	1 (2)	59
Others	18 (50)	6 (17)	5 (14)	7 (19)	13 (36)	5 (14)	2 (6)	3 (8)	0 (0)	36
Manufacturing sector total	82 (36)	20 (9)	27 (12)	35 (15)	107 (47)	40 (17)	18 (8)	16 (7)	6 (3)	229
Trading	31 (42)	9 (12)	9 (12)	13 (18)	38 (51)	5 (7)	2 (3)	2 (3)	1 (1)	74
Retail	1 (25)	0 (0)	0 (0)	1 (25)	2 (50)	1 (25)	1 (25)	0 (0)	0 (0)	4
Construction/Civil engineering	0 (0)	0 (0)	0 (0)	0 (0)	4 (100)	0 (0)	0 (0)	0 (0)	0 (0)	4
Others	4 (29)	3 (21)	1 (7)	0 (0)	10 (71)	0 (0)	0 (0)	0 (0)	0 (0)	14
Non-manufacturing sector total	36 (38)	12 (13)	10 (10)	14 (15)	54 (56)	6 (6)	3 (3)	2 (2)	1 (1)	96
Total	118 (36)	32 (10)	37 (11)	49 (15)	161 (50)	46 (14)	21 (6)	18 (6)	7 (2)	325

(Table 5-3) Export Trend in 2023 (First Half)

Industry	Unit: No. of firms and (%)									
	Increase			No change	Decrease			No. of firms		
	> 20%	10-20%	< 10%		< 10%	10-20%	> 20%			
Food	3 (33)	0 (0)	2 (22)	1 (11)	4 (44)	2 (22)	0 (0)	0 (0)	2 (22)	9
Textile	4 (44)	1 (11)	1 (11)	2 (22)	2 (22)	3 (33)	1 (11)	1 (11)	1 (11)	9
Chemical	11 (31)	3 (9)	5 (14)	3 (9)	19 (54)	5 (14)	4 (11)	1 (3)	0 (0)	35
Steel/Non-ferrous metal	4 (13)	0 (0)	1 (3)	3 (10)	24 (80)	2 (7)	2 (7)	0 (0)	0 (0)	30
General machinery	6 (43)	0 (0)	2 (14)	4 (29)	7 (50)	1 (7)	0 (0)	1 (7)	0 (0)	14
Electrical/Electronic machinery	13 (38)	3 (9)	3 (9)	7 (21)	10 (29)	11 (32)	6 (18)	3 (9)	2 (6)	34
Transportation machinery	21 (34)	3 (5)	6 (10)	12 (20)	32 (52)	8 (13)	3 (5)	3 (5)	2 (3)	61
Others	18 (51)	1 (3)	7 (20)	10 (29)	12 (34)	5 (14)	5 (14)	0 (0)	0 (0)	35
Manufacturing sector total	80 (35)	11 (5)	27 (12)	42 (19)	110 (48)	37 (16)	21 (9)	9 (4)	7 (3)	227
Trading	26 (36)	5 (7)	9 (12)	12 (16)	41 (56)	6 (8)	2 (3)	2 (3)	2 (3)	73
Retail	1 (25)	0 (0)	0 (0)	1 (25)	2 (50)	1 (25)	1 (25)	0 (0)	0 (0)	4
Construction/Civil engineering	0 (0)	0 (0)	0 (0)	0 (0)	4 (100)	0 (0)	0 (0)	0 (0)	0 (0)	4
Others	6 (43)	0 (0)	3 (21)	3 (21)	8 (57)	0 (0)	0 (0)	0 (0)	0 (0)	14
Non-manufacturing sector total	33 (35)	5 (5)	12 (13)	16 (17)	55 (58)	7 (7)	3 (3)	2 (2)	2 (2)	95
Total	113 (35)	16 (5)	39 (12)	58 (18)	165 (51)	44 (14)	24 (7)	11 (3)	9 (3)	322

(Note) Compared to the same period of the previous year



## 6. POTENTIAL EXPORT MARKETS IN THE FUTURE (multiple answers)

Regarding potential export markets in the future, “Vietnam” (47%) ranks first on the list of future potential export markets from Thailand, followed by “India” (38%), “Indonesia” (30%), and “Japan” (20%), respectively. (Table 6)

(Table 6) Potential Export Markets in the Future (Multiple Answers)

			Unit: No. of firms and (%)															
The survey before last	Last survey	Current survey		Manufacturing							Non-manufacturing					Total		
				Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Construction/Civil engineering		Others	Non-manufacturing sector total
1	1	1	Vietnam	2 (20)	3 (38)	14 (41)	12 (36)	7 (47)	13 (38)	22 (39)	17 (52)	90 (40)	45 (63)	1 (25)	2 (67)	8 (80)	56 (64)	146 (47)
2	3	2	India	1 (10)	7 (88)	13 (38)	14 (42)	5 (33)	13 (38)	20 (35)	14 (42)	87 (39)	29 (41)	0 (0)	0 (0)	3 (30)	32 (36)	119 (38)
3	2	3	Indonesia	2 (20)	1 (13)	7 (21)	14 (42)	7 (47)	8 (24)	21 (37)	9 (27)	69 (31)	20 (28)	1 (25)	0 (0)	4 (40)	25 (28)	94 (30)
4	4	4	Japan	2 (20)	0 (0)	4 (12)	3 (9)	2 (13)	11 (32)	13 (23)	7 (21)	42 (19)	17 (24)	1 (25)	0 (0)	3 (30)	21 (24)	63 (20)
9	6	5	Malaysia	2 (20)	0 (0)	7 (21)	6 (18)	3 (20)	8 (24)	9 (16)	9 (27)	44 (20)	10 (14)	1 (25)	0 (0)	2 (20)	13 (15)	57 (18)
6	5	6	USA	7 (70)	0 (0)	5 (15)	2 (6)	3 (20)	7 (21)	8 (14)	8 (24)	40 (18)	8 (11)	0 (0)	0 (0)	1 (10)	9 (10)	49 (16)
5	7	7	China	4 (40)	1 (13)	9 (26)	1 (3)	2 (13)	7 (21)	6 (11)	9 (27)	39 (17)	5 (7)	0 (0)	0 (0)	0 (0)	5 (6)	44 (14)
7	8	8	Europe	2 (20)	2 (25)	4 (12)	2 (6)	2 (13)	3 (9)	4 (7)	6 (18)	25 (11)	3 (4)	0 (0)	0 (0)	1 (10)	4 (5)	29 (9)
8	10	9	Philippines	1 (10)	1 (13)	3 (9)	1 (3)	1 (7)	5 (15)	4 (7)	3 (9)	19 (8)	6 (8)	1 (25)	0 (0)	2 (20)	9 (10)	28 (9)
10	9	10	Cambodia	1 (10)	0 (0)	1 (3)	1 (3)	1 (7)	2 (6)	5 (9)	2 (6)	13 (6)	8 (11)	2 (50)	0 (0)	1 (10)	11 (13)	24 (8)
13	11	11	Middle East	1 (10)	0 (0)	2 (6)	4 (12)	0 (0)	6 (18)	3 (5)	4 (12)	20 (9)	1 (1)	0 (0)	0 (0)	1 (10)	2 (2)	22 (7)
18	18	12	Latin America	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	1 (3)	6 (11)	4 (12)	12 (5)	3 (4)	0 (0)	0 (0)	0 (0)	3 (3)	15 (5)
19	16	13	Singapore	0 (0)	0 (0)	2 (6)	1 (3)	1 (7)	2 (6)	1 (2)	4 (12)	11 (5)	1 (1)	0 (0)	0 (0)	2 (20)	3 (3)	14 (4)
12	15	14	Africa	1 (10)	0 (0)	0 (0)	0 (0)	2 (13)	3 (9)	4 (7)	1 (3)	11 (5)	1 (1)	0 (0)	0 (0)	1 (10)	2 (2)	13 (4)
13	17	15	Pakistan	0 (0)	1 (13)	2 (6)	1 (3)	0 (0)	0 (0)	5 (9)	0 (0)	9 (4)	2 (3)	0 (0)	0 (0)	0 (0)	2 (2)	11 (4)
11	12	16	Myanmar	1 (10)	1 (13)	3 (9)	0 (0)	1 (7)	2 (6)	1 (2)	0 (0)	9 (4)	1 (1)	0 (0)	0 (0)	0 (0)	1 (1)	10 (3)
13	13	17	Laos	1 (10)	0 (0)	1 (3)	0 (0)	1 (7)	1 (3)	2 (4)	1 (3)	7 (3)	1 (1)	0 (0)	0 (0)	0 (0)	1 (1)	8 (3)
16	19	17	Oceania	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	2 (6)	2 (4)	0 (0)	5 (2)	3 (4)	0 (0)	0 (0)	0 (0)	3 (3)	8 (3)
16	14	19	Bangladesh	0 (0)	1 (13)	2 (6)	0 (0)	2 (13)	0 (0)	0 (0)	0 (0)	5 (2)	2 (3)	0 (0)	0 (0)	0 (0)	2 (2)	7 (2)
20	20	20	Sri Lanka	0 (0)	2 (25)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (1)
21	21	21	Russia	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
-	-	-	Others	0 (0)	0 (0)	1 (3)	3 (9)	0 (0)	2 (6)	5 (9)	0 (0)	11 (5)	2 (3)	0 (0)	1 (33)	0 (0)	3 (3)	14 (4)
Total				28	20	82	65	40	96	141	98	570	168	7	3	29	207	777
No. of firms				10	8	34	33	15	34	57	33	224	71	4	3	10	88	312

## 7. EXCHANGE RATES USED IN BUSINESS PLANNING

### (1) Thai Baht/US Dollar

Regarding the exchange rates used in business planning (Thai Baht per US Dollar), the predominant rates used are in a range between “No less than 35.0 but less than 35.5” (16.5%), followed by “No less than 35.5 but less than 36.0” (15.6%), with the median rate at 35.0 baht/US dollar. (Table 7-1)

(Table 7-1) Exchange Rates Used in Business Planning (Thai Baht/US Dollar)

Unit: Thai Baht/US Dollar, No. of firms, and (%)

Industry Baht/US Dollar	Manufacturing									Non-manufacturing				Total
	Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Others	Non-manufacturing sector total	
No less than 29.0 but less than 29.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
No less than 29.5 but less than 30.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
No less than 30.0 but less than 30.5	0	0	1	0	0	0	0	1	2	0	0	0	0	2 (0.9)
No less than 30.5 but less than 31.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
No less than 31.0 but less than 31.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
No less than 31.5 but less than 32.0	1	0	0	0	0	0	2	1	4	1	0	0	1	5 (2.3)
No less than 32.0 but less than 32.5	1	0	0	1	2	2	2	0	8	1	0	1	2	10 (4.6)
No less than 32.5 but less than 33.0	1	1	1	0	0	1	3	4	11	3	0	1	4	15 (6.9)
No less than 33.0 but less than 33.5	0	0	2	2	5	2	7	2	20	6	0	1	7	27 (12.4)
No less than 33.5 but less than 34.0	0	0	0	0	0	3	0	0	3	3	0	0	3	6 (2.8)
No less than 34.0 but less than 34.5	0	1	1	3	0	3	4	4	16	3	0	0	3	19 (8.7)
No less than 34.5 but less than 35.0	2	1	1	1	0	1	2	1	9	2	0	2	4	13 (6.0)
No less than 35.0 but less than 35.5	0	3	3	1	1	3	10	1	22	10	1	3	14	36 (16.5)
No less than 35.5 but less than 36.0	0	2	6	6	1	4	5	3	27	6	0	1	7	34 (15.6)
No less than 36.0 but less than 36.5	0	0	3	2	1	2	1	2	11	4	0	1	5	16 (7.3)
No less than 36.5 but less than 37.0	0	0	3	4	0	3	1	3	14	1	0	0	1	15 (6.9)
No less than 37.0 but less than 37.5	0	0	2	1	0	2	1	1	7	0	1	0	1	8 (3.7)
No less than 37.5 but less than 38.0	0	0	0	1	0	1	2	1	5	1	0	0	1	6 (2.8)
No less than 38.0 but less than 38.5	0	0	0	1	0	0	1	1	3	3	0	0	3	6 (2.8)
No. of firms	5	8	23	23	10	27	41	25	162	44	2	10	56	218

Average	33.08	34.66	35.11	35.40	34.03	35.01	34.54	34.53	34.73	33.14	36.05	30.86	32.83	33.78
Median	32.50	35.00	35.50	35.70	33.20	35.00	34.75	34.30	35.00	35.00	36.05	34.70	35.00	35.00
Mode	#N/A	35.00	36.20	36.50	33.00	34.00	35.00	32.50	35.00	35.00	#N/A	35.00	35.00	35.00

(Note) Median is the value located at the center of the data distribution, which would exclude any deviation resulting from the number of respondents or the irregular low/high values as much as possible. Mode is the value most cited by the respondents and #N/A (Not Applicable) indicates that all respondents' values differ.

(Previous survey)

Industry Baht/US Dollar	Manufacturing									Non-manufacturing				Total
	Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Others	Non-manufacturing sector total	
Average	32.80	33.43	32.77	33.12	32.85	33.06	33.07	32.86	32.99	32.93	33.30	33.13	32.99	32.99
Median	32.50	34.00	33.00	33.30	32.85	33.00	33.20	32.95	33.00	33.00	33.50	33.10	33.00	33.00
Mode	32.50	34.00	33.00	33.50	32.50	33.00	33.30	33.30	32.50	32.50	33.50	33.50	32.50	32.50

(Note) Median is the value located at the center of the data distribution, which would exclude any deviation resulting from the number of respondents or the irregular low/high values as much as possible. Mode is the value most cited by the respondents and #N/A (Not Applicable) indicates that all respondents' values differ.

## (2) Japanese Yen/Thai Baht

Regarding the exchange rates used in business planning (Japanese Yen per Thai Baht), the predominant rates used are in a range between “No less than 3.8 but less than 3.9” (21.8%), followed by “No less than 3.7 but less than 3.8” (19.1%), with the median rate at 3.70 yen/baht. (Table 7-2)

(Table 7-2) Exchange Rates Used in Business Planning (Japanese Yen/Thai Baht)

Unit: Japanese Yen/Thai Baht, No. of firms, and (%)

Industry Yen/Baht	Manufacturing									Non-manufacturing				Total	
	Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Others	Non-manufacturing sector total		
No less than 2.6 but less than 2.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
No less than 2.7 but less than 2.8	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0 (0.3)
No less than 2.8 but less than 2.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
No less than 2.9 but less than 3.0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	0 (0.3)
No less than 3.0 but less than 3.1	0	0	0	1	0	0	1	0	2	0	0	0	0	2	0 (0.7)
No less than 3.1 but less than 3.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0.0)
No less than 3.2 but less than 3.3	0	0	0	0	0	1	1	0	2	0	0	0	0	2	0 (0.7)
No less than 3.3 but less than 3.4	1	0	0	0	0	1	4	3	9	3	0	3	6	15	5 (5.0)
No less than 3.4 but less than 3.5	1	0	2	3	3	5	8	2	24	5	0	3	8	32	10 (10.7)
No less than 3.5 but less than 3.6	1	0	3	5	2	6	9	5	31	11	2	2	15	46	15 (15.4)
No less than 3.6 but less than 3.7	0	0	4	2	2	5	10	2	25	10	0	1	11	36	12 (12.1)
No less than 3.7 but less than 3.8	2	3	7	5	2	4	9	4	36	19	0	2	21	57	19 (19.1)
No less than 3.8 but less than 3.9	3	3	8	7	1	7	10	9	48	10	3	4	17	65	21 (21.8)
No less than 3.9 but less than 4.0	0	3	2	5	3	5	2	3	23	8	0	4	12	35	11 (11.7)
No less than 4.0 but less than 4.1	0	0	1	1	0	0	0	0	2	2	0	0	2	4	1 (1.3)
No. of firms	8	10	27	29	13	35	54	30	206	68	5	19	92	298	
Average	3.63	3.71	3.56	3.67	3.64	3.60	3.52	4.78	3.77	3.66	3.68	3.63	3.65	3.71	
Median	3.70	3.80	3.70	3.70	3.60	3.60	3.60	3.70	3.70	3.70	3.80	3.70	3.70	3.70	
Mode	3.80	3.90	3.80	3.80	3.90	3.80	3.60	3.80	3.80	3.70	3.80	3.90	3.70	3.80	

(Note) Median is the value located at the center of the data distribution, which would exclude any deviation resulting from the number of respondents or the irregularity low/high values as much as possible. Mode is the value most cited by the respondents and #N/A (Not Applicable) indicates that all respondents' values differ.

(Previous survey)

Industry Yen/Baht	Manufacturing									Non-manufacturing				Total
	Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Others	Non-manufacturing sector total	
Average	3.50	3.50	3.47	3.47	3.47	3.48	3.46	3.48	3.47	3.45	3.52	3.51	3.47	3.47
Median	3.50	3.50	3.50	3.50	3.50	3.50	3.40	3.50	3.50	3.50	3.50	3.50	3.50	3.50
Mode	3.50	3.70	3.50	3.50	3.50	3.40	3.40	3.50	3.50	3.50	3.70	3.50	3.50	3.50

(Note) Median is the value located at the center of the data distribution, which would exclude any deviation resulting from the number of respondents or the irregularity low/high values as much as possible. Mode is the value most cited by the respondents and #N/A (Not Applicable) indicates that all respondents' values differ.

## 8. PROCUREMENT SOURCES FOR PARTS/MATERIALS

Regarding the ratios of procurement sources for parts/materials in 2022 (a simple arithmetic average of the respondents' answers), "ASEAN" accounted for 62.8% of parts/material supply, of which 58.1% was sourced from "Thailand". (Table 8-1)

As for procurement plans in 2023, procurement from "ASEAN" accounts for 63.1%, of which 58.1% will be sourced domestically in "Thailand". (Table 8-2)

(Table 8-1) Procurement Sources for Parts/Materials in 2022

Industry		ASEAN			Japan	China	Others	Total	Unit: %	
		Thailand	ASEAN (Except Thailand)	No. of firms						
Manufacturing	Food	82.9	79.7	3.2	8.6	4.6	4.0	100.0	9	
	Textile	51.1	46.7	4.4	16.0	18.1	14.8	100.0	10	
	Chemical	62.4	47.1	15.3	28.5	7.1	2.0	100.0	28	
	Steel/Non-ferrous metal	56.2	51.3	4.9	34.5	4.8	4.5	100.0	34	
	General machinery	63.3	60.9	2.3	26.1	6.3	4.3	100.0	15	
	Electrical/Electronic machinery	49.5	42.1	7.3	31.3	13.4	5.8	100.0	34	
	Transportation machinery	72.0	69.0	3.0	22.7	3.9	1.4	100.0	61	
	Others	57.2	53.6	3.6	30.0	1.5	11.3	100.0	33	
Manufacturing sector average		61.8	56.3	5.5	24.7	7.5	6.0	100.0	224	
Non-manufacturing	Trading	42.4	35.6	6.8	42.7	8.7	6.2	100.0	69	
	Retail	61.0	57.0	4.0	18.0	17.0	4.0	100.0	5	
	Construction/Civil engineering	91.3	91.3	0.0	0.0	0.5	8.3	100.0	4	
	Others	60.4	56.1	4.3	20.7	0.0	18.9	100.0	14	
Non-manufacturing sector average		63.8	60.0	3.8	20.4	6.5	9.3	100.0	92	
Total		62.8	58.1	4.6	22.5	7.0	7.7	100.0	316	

(Note) The ratios indicate the simple average of the respondents' answers.

(Table 8-2) Procurement Sources for Parts/Materials in 2023

Industry		ASEAN			Japan	China	Others	Total	Unit: %	
		Thailand	ASEAN (Except Thailand)	No. of firms						
Manufacturing	Food	80.1	76.5	3.6	10.3	5.1	4.5	100.0	8	
	Textile	53.1	46.7	6.4	16.0	16.6	14.3	100.0	10	
	Chemical	62.8	48.0	14.8	28.3	6.9	2.1	100.0	28	
	Steel/Non-ferrous metal	56.2	50.8	5.4	34.5	4.7	4.6	100.0	33	
	General machinery	65.7	62.7	3.0	25.0	6.0	3.2	100.0	14	
	Electrical/Electronic machinery	50.3	43.1	7.2	31.0	13.0	5.8	100.0	34	
	Transportation machinery	71.2	68.2	2.9	23.2	4.0	1.7	100.0	60	
	Others	59.6	56.1	3.5	28.6	1.3	10.5	100.0	34	
Manufacturing sector average		62.4	56.5	5.8	24.6	7.2	5.8	100.0	221	
Non-manufacturing	Trading	44.6	37.1	7.6	40.6	8.7	6.0	100.0	68	
	Retail	59.0	55.0	4.0	20.0	17.0	4.0	100.0	5	
	Construction/Civil engineering	91.3	91.3	0.0	0.0	0.5	8.3	100.0	4	
	Others	60.6	55.3	5.4	20.8	0.0	18.6	100.0	14	
Non-manufacturing sector average		63.9	59.7	4.2	20.4	6.6	9.2	100.0	91	
Total		63.1	58.1	5.0	22.5	6.9	7.5	100.0	312	

(Note) The ratios indicate the simple average of the respondents' answers.

## 9. CHALLENGES FOR CORPORATE MANAGEMENT (multiple answers)

Regarding challenges for the Japanese companies' corporate management, the predominant answer is "Severe competition with other companies" (64%), followed by "Surging prices of raw materials and parts" (63%), "Increase in total labor cost" (39%), and "Increase in logistics cost" (36%).

Another popular choice for firms in the manufacturing sector is "Rising energy cost" (45%), while many companies in the non-manufacturing sector also cited "Employee's job hopping" (26%) as a challenge. (Table 9)

(Table 9) Challenges for Corporate Management (Multiple Answers)

Unit: No. of firms and (%)

Previous survey	Current survey	Manufacturing									Non-manufacturing							Total
		Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Finance/Insurance/Securities	Construction/Civil engineering	Transportation/Communication	Others	Non-manufacturing sector total	
2	1	6 (60)	6 (60)	25 (64)	24 (65)	12 (67)	21 (50)	39 (57)	23 (59)	156 (59)	52 (66)	7 (70)	15 (68)	20 (80)	21 (81)	42 (63)	157 (69)	313 (64)
1	2	9 (90)	8 (80)	35 (90)	23 (62)	14 (78)	39 (93)	57 (84)	29 (74)	214 (81)	42 (53)	6 (60)	2 (9)	15 (60)	8 (31)	22 (33)	95 (41)	309 (63)
4	3	3 (30)	3 (30)	18 (46)	14 (38)	7 (39)	22 (52)	33 (49)	16 (41)	116 (44)	17 (22)	3 (30)	7 (32)	10 (40)	12 (46)	25 (37)	74 (32)	190 (39)
3	4	4 (40)	5 (50)	27 (69)	10 (27)	12 (67)	27 (64)	31 (46)	14 (36)	130 (49)	31 (39)	4 (40)	0 (0)	0 (0)	7 (27)	6 (9)	48 (21)	178 (36)
5	4	6 (60)	4 (40)	27 (69)	11 (30)	6 (33)	26 (62)	29 (43)	10 (26)	119 (45)	33 (42)	3 (30)	1 (5)	4 (16)	5 (19)	13 (19)	59 (26)	178 (36)
11	6	5 (50)	4 (40)	26 (67)	14 (38)	2 (11)	15 (36)	37 (54)	16 (41)	119 (45)	9 (11)	0 (0)	1 (5)	2 (8)	5 (19)	5 (7)	22 (10)	141 (29)
9	7	0 (0)	1 (10)	11 (28)	9 (24)	7 (39)	15 (36)	20 (29)	14 (36)	77 (29)	11 (14)	1 (10)	1 (5)	17 (68)	1 (4)	12 (18)	43 (19)	120 (24)
7	8	3 (30)	2 (20)	7 (18)	9 (24)	7 (39)	6 (14)	17 (25)	8 (21)	59 (22)	24 (30)	3 (30)	5 (23)	2 (8)	4 (15)	15 (22)	53 (23)	112 (23)
8	9	1 (10)	0 (0)	4 (10)	5 (14)	3 (17)	9 (21)	16 (24)	6 (15)	44 (17)	22 (28)	5 (50)	11 (50)	6 (24)	2 (8)	11 (16)	57 (25)	101 (21)
9	10	0 (0)	0 (0)	9 (23)	2 (5)	2 (11)	8 (19)	13 (19)	2 (5)	36 (14)	17 (22)	3 (30)	8 (36)	6 (24)	6 (23)	20 (30)	60 (26)	96 (20)
12	11	1 (10)	2 (20)	8 (21)	7 (19)	5 (28)	14 (33)	22 (32)	10 (26)	69 (26)	5 (6)	0 (0)	2 (9)	4 (16)	4 (15)	7 (10)	22 (10)	91 (18)
13	12	2 (20)	1 (10)	2 (5)	6 (16)	4 (22)	9 (21)	9 (13)	11 (28)	44 (17)	7 (9)	1 (10)	5 (23)	5 (20)	8 (31)	12 (18)	38 (17)	82 (17)
15	13	0 (0)	2 (20)	5 (13)	9 (24)	3 (17)	3 (7)	7 (10)	4 (10)	33 (13)	14 (18)	1 (10)	3 (14)	4 (16)	5 (19)	9 (13)	36 (16)	69 (14)
16	14	1 (10)	0 (0)	9 (23)	6 (16)	0 (0)	2 (5)	13 (19)	3 (8)	34 (13)	6 (8)	2 (20)	2 (9)	2 (8)	2 (8)	3 (4)	17 (7)	51 (10)
14	15	2 (20)	2 (20)	4 (10)	2 (5)	1 (6)	2 (5)	7 (10)	0 (0)	20 (8)	3 (4)	2 (20)	2 (9)	4 (16)	2 (8)	12 (18)	25 (11)	45 (9)
6	16	1 (10)	0 (0)	5 (13)	7 (19)	1 (6)	3 (7)	4 (6)	5 (13)	26 (10)	6 (8)	0 (0)	0 (0)	1 (4)	2 (8)	6 (9)	15 (7)	41 (8)
17	17	1 (10)	0 (0)	5 (13)	1 (3)	2 (11)	3 (7)	13 (19)	0 (0)	25 (10)	0 (0)	0 (0)	1 (5)	2 (8)	5 (19)	4 (6)	12 (5)	37 (8)
18	18	0 (0)	0 (0)	1 (3)	2 (5)	2 (11)	0 (0)	1 (1)	1 (3)	7 (3)	6 (8)	1 (10)	4 (18)	4 (16)	1 (4)	3 (4)	19 (8)	26 (5)
19	19	0 (0)	0 (0)	4 (10)	2 (5)	0 (0)	0 (0)	3 (4)	1 (3)	10 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (4)	3 (1)	13 (3)
22	20	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	2 (3)	1 (10)	2 (9)	3 (12)	0 (0)	3 (4)	11 (5)	12 (2)
20	21	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	4 (5)	0 (0)	1 (5)	1 (4)	0 (0)	4 (6)	10 (4)	10 (2)
20	22	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (3)	0 (0)	2 (1)	0 (0)	1 (10)	1 (5)	0 (0)	2 (8)	3 (4)	7 (3)	9 (2)
23	23	1 (10)	0 (0)	1 (3)	2 (5)	0 (0)	1 (2)	1 (1)	1 (3)	7 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	7 (1)
25	24	0 (0)	0 (0)	1 (3)	1 (3)	0 (0)	0 (0)	1 (1)	1 (3)	4 (2)	1 (1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	5 (1)
24	25	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)	1 (3)	3 (1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (1)
-	-	0 (0)	0 (0)	1 (3)	1 (3)	1 (6)	0 (0)	4 (6)	3 (8)	10 (4)	1 (1)	0 (0)	2 (9)	0 (0)	0 (0)	3 (4)	6 (3)	16 (3)
Total		46	40	236	169	91	225	379	179	1,365	313	44	76	112	102	243	890	2,255
No. of firms		10	10	39	37	18	42	68	39	263	79	10	22	25	26	67	229	492

## 10. REQUESTS TO THE THAI GOVERNMENT

### (1) Requests to the Thai Government (multiple answers)

“Improvement of customs duty and clearance regulations and its implementation” (35%) is most requested by the responding companies, followed by “Stabilization of foreign exchange rates” (34%) and “Development of transportation infrastructure” (34%).

“Implementation of flood prevention measures” (31%) is also popular among the manufacturing sector, while “Relaxation of the Foreign Business Act” (25%) is also a predominant request among the non-manufacturing sector. (Table 10-1)

(Table 10-1) Requests to the Thai Government (Multiple Answers)

Unit: No. of firms and (%)

Previous survey	Current survey	Manufacturing										Non-manufacturing						Total
		Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Finance/Insurance/Securities	Construction/Civil engineering	Transportation/Communication	Others	Non-manufacturing sector total	
2	1	2 (20)	5 (63)	14 (39)	16 (48)	4 (24)	18 (46)	18 (28)	13 (37)	90 (37)	36 (49)	2 (22)	2 (11)	4 (17)	11 (46)	14 (22)	69 (33)	159 (35)
4	2	5 (50)	5 (63)	20 (56)	13 (39)	6 (35)	19 (49)	23 (36)	15 (43)	106 (44)	25 (34)	3 (33)	2 (11)	3 (13)	3 (13)	12 (19)	48 (23)	154 (34)
5	2	2 (20)	2 (25)	12 (33)	8 (24)	9 (53)	12 (31)	21 (33)	12 (34)	78 (32)	31 (42)	1 (11)	4 (22)	5 (22)	16 (67)	19 (30)	76 (36)	154 (34)
3	4	2 (20)	1 (13)	11 (31)	10 (30)	4 (24)	19 (49)	19 (30)	12 (34)	78 (32)	20 (27)	3 (33)	5 (28)	7 (30)	8 (33)	18 (28)	61 (29)	139 (31)
10	5	4 (40)	3 (38)	10 (28)	11 (33)	7 (41)	11 (28)	19 (30)	10 (29)	75 (31)	19 (26)	1 (11)	4 (22)	3 (13)	4 (17)	14 (22)	45 (21)	120 (26)
1	6	3 (30)	1 (13)	7 (19)	9 (27)	3 (18)	7 (18)	20 (31)	6 (17)	56 (23)	19 (26)	4 (44)	6 (33)	2 (9)	3 (13)	7 (11)	41 (19)	97 (21)
7	7	2 (20)	1 (13)	5 (14)	3 (9)	0 (0)	5 (13)	8 (13)	5 (14)	29 (12)	17 (23)	1 (11)	4 (22)	7 (30)	3 (13)	20 (31)	52 (25)	81 (18)
9	8	3 (30)	2 (25)	4 (11)	6 (18)	2 (12)	12 (31)	16 (25)	7 (20)	52 (21)	16 (22)	1 (11)	1 (6)	0 (0)	1 (4)	2 (3)	21 (10)	73 (16)
10	9	0 (0)	0 (0)	3 (8)	3 (9)	2 (12)	6 (15)	3 (5)	3 (9)	20 (8)	14 (19)	3 (33)	2 (11)	4 (17)	8 (33)	17 (27)	48 (23)	68 (15)
1	10	0 (0)	2 (25)	4 (11)	8 (24)	2 (12)	2 (5)	14 (22)	6 (17)	38 (16)	9 (12)	1 (11)	1 (6)	6 (26)	4 (17)	5 (8)	26 (12)	64 (14)
8	10	0 (0)	2 (25)	5 (14)	2 (6)	1 (6)	12 (31)	13 (20)	6 (17)	41 (17)	7 (10)	1 (11)	2 (11)	2 (9)	0 (0)	11 (17)	23 (11)	64 (14)
12	12	1 (10)	0 (0)	2 (6)	8 (24)	4 (24)	6 (15)	6 (9)	4 (11)	31 (13)	9 (12)	0 (0)	3 (17)	0 (0)	4 (17)	5 (8)	21 (10)	52 (11)
18	13	0 (0)	0 (0)	2 (6)	3 (9)	1 (6)	5 (13)	6 (9)	2 (6)	19 (8)	9 (12)	0 (0)	2 (11)	5 (22)	2 (8)	13 (20)	31 (15)	50 (11)
13	13	0 (0)	1 (13)	3 (8)	4 (12)	3 (18)	3 (8)	9 (14)	2 (6)	25 (10)	6 (8)	1 (11)	5 (28)	4 (17)	2 (8)	7 (11)	25 (12)	50 (11)
-	15	0 (0)	3 (38)	3 (8)	2 (6)	3 (18)	5 (13)	13 (20)	2 (6)	31 (13)	4 (5)	0 (0)	2 (11)	2 (9)	2 (8)	2 (3)	12 (6)	43 (9)
17	16	0 (0)	0 (0)	4 (11)	3 (9)	1 (6)	4 (10)	16 (25)	1 (3)	29 (12)	1 (1)	0 (0)	0 (0)	0 (0)	3 (13)	2 (3)	6 (3)	35 (8)
-	17	0 (0)	1 (13)	2 (6)	3 (9)	1 (6)	3 (8)	3 (5)	3 (9)	16 (7)	8 (11)	0 (0)	4 (22)	1 (4)	1 (4)	4 (6)	18 (9)	34 (8)
1	18	0 (0)	0 (0)	4 (11)	3 (9)	3 (18)	2 (5)	6 (9)	2 (6)	20 (8)	2 (3)	0 (0)	2 (11)	1 (4)	1 (4)	6 (9)	12 (6)	32 (7)
15	19	1 (10)	0 (0)	4 (11)	0 (0)	2 (12)	3 (8)	2 (3)	3 (9)	15 (6)	7 (10)	0 (0)	0 (0)	1 (4)	3 (13)	4 (6)	15 (7)	30 (7)
16	20	0 (0)	0 (0)	2 (6)	3 (9)	1 (6)	5 (13)	4 (6)	2 (6)	17 (7)	6 (8)	0 (0)	2 (11)	2 (9)	0 (0)	2 (3)	12 (6)	29 (6)
14	21	0 (0)	1 (13)	3 (8)	0 (0)	0 (0)	0 (0)	2 (3)	5 (14)	11 (5)	4 (5)	1 (11)	1 (6)	1 (4)	9 (38)	1 (2)	17 (8)	28 (6)
6	22	1 (10)	1 (13)	5 (14)	5 (15)	1 (6)	1 (3)	3 (5)	1 (3)	18 (7)	2 (3)	0 (0)	1 (6)	0 (0)	1 (4)	0 (0)	4 (2)	22 (5)
21	23	0 (0)	0 (0)	3 (8)	4 (12)	0 (0)	0 (0)	0 (0)	1 (3)	8 (3)	2 (3)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	3 (1)	11 (2)
20	24	0 (0)	0 (0)	2 (6)	0 (0)	0 (0)	3 (8)	2 (3)	0 (0)	7 (3)	1 (1)	0 (0)	0 (0)	0 (0)	1 (4)	1 (2)	3 (1)	10 (2)
19	25	0 (0)	0 (0)	1 (3)	1 (3)	0 (0)	1 (3)	1 (2)	1 (3)	5 (2)	1 (1)	0 (0)	1 (6)	0 (0)	0 (0)	1 (2)	3 (1)	8 (2)
1	26	0 (0)	0 (0)	1 (3)	2 (6)	0 (0)	1 (3)	0 (0)	0 (0)	4 (2)	0 (0)	0 (0)	1 (6)	1 (4)	0 (0)	1 (2)	3 (1)	7 (2)
1	27	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	1 (0)	1 (1)	0 (0)	0 (0)	1 (4)	0 (0)	2 (3)	4 (2)	5 (1)
-	-	1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	1 (2)	3 (9)	6 (2)	4 (5)	0 (0)	0 (0)	2 (9)	2 (8)	3 (5)	11 (5)	17 (4)
Total		27	31	136	130	60	167	248	127	926	280	23	57	64	92	194	710	1,578
No. of firms		10	8	36	33	17	39	64	35	242	73	9	18	23	24	64	211	453

(Note 1) "Promotion of economic stimulus measures (e.g. public infrastructure development)," which appeared up until the previous survey, was broken down into five choices namely "Promotion of economic stimulus measures (public investment)," "Promotion of economic stimulus measures (financial assistance)," "Promotion of economic stimulus measures (tax measures)," "Promotion of economic stimulus measures (consumption stimulus measures)," and "Promotion of economic stimulus measures (others)" from this survey.

(Note 2) "Development of transportation infrastructure in the Bangkok metropolitan area," which appeared up until the previous survey, was changed to "Development of transportation infrastructure" from this survey.

(Note 3) "Improvement of regulations related to green energy and its implementation" was added to the choices from this survey.

(Note 4) "There is no request to the Thai government" was added to the choices from this survey.

## (2) Recent Improvement in Investment Environment (Policy Evaluation, multiple answers)

The policy area that most of the Japanese firms recognized some improvement recently is the “Measures to address the impacts of the Covid-19” (33%), followed by “Development of transportation infrastructure” (27%), “Development of communication infrastructure” (16%), “Flood prevention measures” (13%), and “Economic ties e.g. FTA and EPA” (12%). (Table 10-2)

(Table 10-2) Recent Policy Improvement (Multiple Answers)

Unit: No. of firms and (%)

Previous survey	Current survey	Manufacturing										Non-manufacturing						Total
		Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Finance/Insurance/Securities	Construction/Civil engineering	Transportation/Communication	Others	Non-manufacturing sector total	
1	1	4 (44)	5 (63)	9 (29)	6 (19)	4 (25)	15 (41)	17 (30)	9 (27)	69 (31)	23 (37)	3 (60)	8 (50)	4 (27)	8 (42)	12 (28)	58 (36)	127 (33)
2	2	3 (33)	2 (25)	11 (35)	7 (22)	6 (38)	10 (27)	11 (19)	11 (33)	61 (27)	15 (24)	2 (40)	3 (19)	5 (33)	6 (32)	13 (30)	44 (28)	105 (27)
5	3	2 (22)	1 (13)	2 (6)	6 (19)	3 (19)	6 (16)	5 (9)	4 (12)	29 (13)	12 (19)	0 (0)	1 (6)	4 (27)	5 (26)	12 (28)	34 (21)	63 (16)
8	4	1 (11)	3 (38)	3 (10)	4 (13)	4 (25)	4 (11)	8 (14)	2 (6)	29 (13)	6 (10)	0 (0)	4 (25)	1 (7)	5 (26)	5 (12)	21 (13)	50 (13)
6	5	1 (11)	0 (0)	3 (10)	3 (9)	0 (0)	5 (14)	9 (16)	4 (12)	25 (11)	7 (11)	0 (0)	4 (25)	0 (0)	6 (32)	5 (12)	22 (14)	47 (12)
4	6	1 (11)	0 (0)	7 (23)	3 (9)	2 (13)	8 (22)	8 (14)	7 (21)	36 (16)	6 (10)	0 (0)	0 (0)	0 (0)	1 (5)	3 (7)	10 (6)	46 (12)
-	7	0 (0)	0 (0)	2 (6)	5 (16)	1 (6)	5 (14)	7 (12)	1 (3)	21 (9)	6 (10)	0 (0)	0 (0)	1 (7)	0 (0)	5 (12)	12 (8)	33 (9)
7	7	0 (0)	2 (25)	5 (16)	5 (16)	2 (13)	1 (3)	2 (4)	1 (3)	18 (8)	5 (8)	0 (0)	2 (13)	1 (7)	3 (16)	4 (9)	15 (9)	33 (9)
3	9	0 (0)	0 (0)	3 (10)	5 (16)	0 (0)	2 (5)	5 (9)	3 (9)	18 (8)	7 (11)	0 (0)	1 (6)	0 (0)	0 (0)	5 (12)	13 (8)	31 (8)
9	10	1 (11)	0 (0)	2 (6)	1 (3)	1 (6)	1 (3)	10 (18)	3 (9)	19 (9)	6 (10)	0 (0)	0 (0)	0 (0)	3 (16)	1 (2)	10 (6)	29 (8)
11	11	1 (11)	0 (0)	1 (3)	0 (0)	1 (6)	0 (0)	5 (9)	3 (9)	11 (5)	3 (5)	0 (0)	2 (13)	0 (0)	1 (5)	1 (2)	7 (4)	18 (5)
10	11	1 (11)	0 (0)	2 (6)	0 (0)	0 (0)	3 (8)	2 (4)	2 (6)	10 (4)	4 (6)	0 (0)	1 (6)	2 (13)	1 (5)	0 (0)	8 (5)	18 (5)
3	13	2 (22)	0 (0)	3 (10)	2 (6)	0 (0)	0 (0)	3 (5)	1 (3)	11 (5)	1 (2)	1 (20)	1 (6)	1 (7)	1 (5)	1 (2)	6 (4)	17 (4)
12	13	0 (0)	0 (0)	2 (6)	2 (6)	3 (19)	1 (3)	1 (2)	0 (0)	9 (4)	3 (5)	0 (0)	0 (0)	0 (0)	1 (5)	4 (9)	8 (5)	17 (4)
14	15	1 (11)	0 (0)	3 (10)	1 (3)	1 (6)	2 (5)	1 (2)	2 (6)	11 (5)	1 (2)	0 (0)	1 (6)	0 (0)	1 (5)	2 (5)	5 (3)	16 (4)
14	15	0 (0)	0 (0)	1 (3)	0 (0)	1 (6)	0 (0)	3 (5)	0 (0)	5 (2)	5 (8)	0 (0)	1 (6)	2 (13)	1 (5)	2 (5)	11 (7)	16 (4)
13	17	1 (11)	0 (0)	2 (6)	1 (3)	0 (0)	0 (0)	3 (5)	0 (0)	7 (3)	5 (8)	0 (0)	0 (0)	0 (0)	0 (0)	2 (5)	7 (4)	14 (4)
3	18	0 (0)	0 (0)	1 (3)	1 (3)	0 (0)	1 (3)	1 (2)	1 (3)	5 (2)	3 (5)	0 (0)	1 (6)	0 (0)	0 (0)	2 (5)	6 (4)	11 (3)
19	18	0 (0)	0 (0)	2 (6)	3 (9)	0 (0)	0 (0)	1 (2)	1 (3)	7 (3)	3 (5)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	4 (3)	11 (3)
18	20	2 (22)	1 (13)	1 (3)	1 (3)	1 (6)	0 (0)	2 (4)	0 (0)	8 (4)	1 (2)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	2 (1)	10 (3)
16	21	0 (0)	1 (13)	0 (0)	1 (3)	0 (0)	0 (0)	3 (5)	1 (3)	6 (3)	1 (2)	0 (0)	0 (0)	1 (7)	1 (5)	0 (0)	3 (2)	9 (2)
16	22	0 (0)	1 (13)	1 (3)	1 (3)	0 (0)	2 (5)	0 (0)	1 (3)	6 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	1 (1)	7 (2)
3	23	0 (0)	0 (0)	0 (0)	2 (6)	0 (0)	0 (0)	2 (4)	0 (0)	4 (2)	0 (0)	0 (0)	1 (6)	0 (0)	0 (0)	1 (2)	2 (1)	6 (2)
19	23	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	1 (0)	3 (5)	0 (0)	1 (6)	0 (0)	0 (0)	1 (2)	5 (3)	6 (2)
21	25	0 (0)	0 (0)	0 (0)	1 (3)	1 (6)	0 (0)	0 (0)	0 (0)	2 (1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (1)
3	26	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	1 (1)	1 (0)
-	-	0 (0)	0 (0)	0 (0)	2 (6)	0 (0)	2 (5)	3 (5)	2 (6)	9 (4)	1 (2)	0 (0)	0 (0)	1 (7)	0 (0)	4 (9)	6 (4)	15 (4)
	Total	21	16	66	63	31	68	112	60	437	127	6	32	23	45	88	321	758
	No. of firms	9	8	31	32	16	37	57	33	223	62	5	16	15	19	43	160	383

(Note 1) 'Promotion of economic stimulus measures (e.g. public infrastructure development),' which appeared up until the previous survey, was broken down into five choices namely 'Promotion of economic stimulus measures (public investment),' 'Promotion of economic stimulus measures (financial assistance),' 'Promotion of economic stimulus measures (tax measures),' 'Promotion of economic stimulus measures (consumption stimulus measures),' and 'Promotion of economic stimulus measures (others)' from this survey.

(Note 2) 'Development of transportation infrastructure in the Bangkok metropolitan area,' which appeared up until the previous survey, was changed to 'Development of transportation infrastructure' from this survey.

(Note 3) 'Regulations related to green energy and its implementation' was added to the choices from this survey.

## 11. THE CURRENT ECONOMIC SITUATION

### (1) The Impact of the Soaring Prices and Shortages of Energy, Resources, and Raw Materials

In response to a question regarding the impact of the soaring prices and shortages of energy (e.g., crude oil), resources, raw materials, etc., most firms indicated that they experience “Some negative impact” (59%) and 24% admitted that they face “Significant negative impact”. Meanwhile, 14% pointed out that there is “No impact”. (Table 11-1)

(Table 11-1) The Impact of the Soaring Prices and Shortages of Energy, Resources, and Raw Materials

Ranking	Manufacturing										Non-manufacturing					Total
	Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Construction/Civil engineering	Transportation/Communication	Others	Non-manufacturing sector total	
1 Some negative impact	3 (30)	5 (50)	20 (53)	21 (57)	16 (89)	25 (60)	39 (59)	20 (53)	149 (58)	56 (70)	7 (78)	18 (72)	16 (62)	41 (46)	138 (60)	287 (59)
2 Significant negative impact	5 (50)	4 (40)	14 (37)	11 (30)	2 (11)	15 (36)	24 (36)	16 (42)	91 (35)	7 (9)	1 (11)	5 (20)	6 (23)	7 (8)	26 (11)	117 (24)
3 No impact	1 (10)	1 (10)	0 (0)	3 (8)	0 (0)	2 (5)	3 (5)	2 (5)	12 (5)	12 (15)	1 (11)	1 (4)	2 (8)	41 (46)	57 (25)	69 (14)
4 Some positive impact	1 (10)	0 (0)	4 (11)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	6 (2)	5 (6)	0 (0)	1 (4)	2 (8)	1 (1)	9 (4)	15 (3)
5 Positive impact	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)
No. of firms	10	10	38	37	18	42	66	38	259	80	9	25	26	90	230	489

### (2) Specific Causes (multiple answers)

When the companies were asked to specifically identify causes of the impact that they experience in item 11(1), “Rising prices of raw materials and parts” (83%) is the respondents’ top choice, followed by “Rising energy prices” (64%) and “Increasing logistics prices” (56%). (Table 11-2)

(Table 11-2) Specific Causes (Multiple Answers)

Ranking	Manufacturing										Non-manufacturing					Total
	Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Construction/Civil engineering	Transportation/Communication	Others	Non-manufacturing sector total	
1 Rising prices of raw materials and parts	8 (89)	7 (70)	30 (79)	28 (82)	17 (94)	40 (100)	60 (95)	34 (94)	224 (90)	53 (78)	7 (88)	23 (96)	9 (38)	36 (72)	128 (74)	352 (83)
2 Rising energy prices	9 (100)	8 (80)	31 (82)	28 (82)	10 (56)	25 (63)	50 (79)	25 (69)	186 (75)	26 (38)	4 (50)	11 (46)	15 (63)	28 (56)	84 (48)	270 (64)
3 Increasing logistics prices	6 (67)	6 (60)	27 (71)	20 (59)	12 (67)	26 (65)	34 (54)	25 (69)	156 (63)	41 (60)	3 (38)	9 (38)	12 (50)	15 (30)	80 (46)	236 (56)
4 Shortage of raw materials and parts	0 (0)	0 (0)	11 (29)	5 (15)	11 (61)	26 (65)	16 (25)	7 (19)	76 (31)	29 (43)	2 (25)	10 (42)	2 (8)	18 (36)	61 (35)	137 (32)
5 Declining prices of raw materials and parts	1 (11)	0 (0)	3 (8)	1 (3)	0 (0)	1 (3)	0 (0)	0 (0)	6 (2)	3 (4)	0 (0)	1 (4)	0 (0)	1 (2)	5 (3)	11 (3)
6 Resolution of the raw material and parts shortage	1 (11)	0 (0)	1 (3)	0 (0)	1 (6)	1 (3)	0 (0)	0 (0)	4 (2)	2 (3)	0 (0)	0 (0)	0 (0)	0 (0)	2 (1)	6 (1)
7 Decreasing logistics prices	1 (11)	0 (0)	1 (3)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	3 (1)	1 (1)	0 (0)	0 (0)	0 (0)	0 (0)	1 (1)	4 (1)
8 Declining energy prices	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)
Total	26	21	105	82	51	120	160	91	656	155	16	54	38	98	361	1,017
No. of firms	9	10	38	34	18	40	63	36	248	68	8	24	24	50	174	422



### (3) The Impact of the Current Logistics Situation

In response to a question whether the company is being affected by logistics disruption and surging transportation costs, 268 companies (56%) indicated that “The company is being affected”, whereas 207 companies (43%) said that “The company is not being affected”. (Table 11-3)

(Table 11-3) The Impact of the Current Logistics Situation

Industry		The company is being affected		The company is not being affected		Others		No. of firms
Manufacturing	Food	8	(80)	2	(20)	0	(0)	10
	Textile	6	(60)	4	(40)	0	(0)	10
	Chemical	28	(76)	9	(24)	0	(0)	37
	Steel/Non-ferrous metal	20	(54)	17	(46)	0	(0)	37
	General machinery	12	(71)	5	(29)	0	(0)	17
	Electrical/Electronic machinery	28	(67)	14	(33)	0	(0)	42
	Transportation machinery	41	(62)	24	(36)	1	(2)	66
	Others	22	(58)	15	(39)	1	(3)	38
Manufacturing sector total		165	(64)	90	(35)	2	(1)	257
Non-manufacturing	Trading	50	(63)	28	(35)	1	(1)	79
	Retail	5	(56)	4	(44)	0	(0)	9
	Finance/Insurance/Securities	2	(11)	17	(89)	0	(0)	19
	Construction/Civil engineering	8	(31)	18	(69)	0	(0)	26
	Transportation/Communication	18	(69)	8	(31)	0	(0)	26
	Others	20	(32)	42	(68)	0	(0)	62
	Non-manufacturing sector total		103	(47)	117	(53)	1	(0)
Total		268	(56)	207	(43)	3	(1)	478

### (4) Specific Impacts of the Current Logistics Situation (multiple answers)

Regarding the specific impacts of logistics disruption and surging transportation costs, “Rising container ship freight rates” (66%) is the most popular choice among the survey respondents, followed by “Shipment schedule delays and disruptions due to port congestion and cargo pileup” (48%) and “Increasing land freight rates” (37%). (Table 11-4)

(Table 11-4) Specific Impacts of the Current Logistics Situation (Multiple Answers)

Ranking	Manufacturing										Non-manufacturing					Total
	Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Construction/Civil engineering	Transportation/Communication	Others	Non-manufacturing sector total	
1	8 (100)	5 (83)	23 (85)	14 (67)	10 (77)	22 (76)	27 (64)	16 (70)	125 (74)	41 (79)	2 (40)	0 (0)	5 (29)	6 (30)	54 (53)	179 (66)
2	4 (50)	3 (50)	10 (37)	7 (33)	9 (69)	19 (66)	24 (57)	11 (48)	87 (51)	26 (50)	3 (60)	1 (13)	6 (35)	8 (40)	44 (43)	131 (48)
3	5 (63)	1 (17)	13 (48)	12 (57)	3 (23)	9 (31)	11 (26)	10 (43)	64 (38)	18 (35)	1 (20)	0 (0)	10 (59)	6 (30)	35 (34)	99 (37)
4	1 (13)	1 (17)	6 (22)	0 (0)	7 (54)	16 (55)	16 (38)	10 (43)	57 (34)	23 (44)	2 (40)	0 (0)	3 (18)	6 (30)	34 (33)	91 (34)
5	3 (38)	1 (17)	5 (19)	2 (10)	0 (0)	11 (38)	12 (29)	5 (22)	39 (23)	12 (23)	1 (20)	0 (0)	4 (24)	1 (5)	18 (18)	57 (21)
6	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	5 (17)	2 (5)	1 (4)	9 (5)	3 (6)	0 (0)	0 (0)	2 (12)	0 (0)	5 (5)	14 (5)
7	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (7)	1 (2)	0 (0)	3 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (1)
-	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	2 (1)	1 (2)	0 (0)	0 (0)	1 (6)	1 (5)	3 (3)	5 (2)
Total	21	11	58	35	29	84	95	53	386	124	9	1	31	28	193	579
No. of firms	8	6	27	21	13	29	42	23	169	52	5	8	17	20	102	271

## 12. SUPPLY CHAIN REVIEW

### (1) Important Considerations When Reviewing the Supply Chain (multiple answers)

When reviewing the company’s supply chain, the greatest number of responding firms indicated that they place importance on “Measure to address shortage of raw materials and parts” (52%), followed by “Measure to address international logistics disruption/increasing transportation costs” (41%) and “Increase and decrease in demand” (27%). (Table 12-1)

(Table 12-1) Important Considerations When Reviewing the Supply Chain (Multiple Answers)

Ranking		Manufacturing									Non-manufacturing					Total	Unit No. of firms and (%)
		Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Construction/Civil engineering	Transportation/Communication	Others		
1	Measure to address shortage of raw materials and parts	6 (60)	6 (60)	27 (73)	14 (39)	11 (61)	35 (83)	40 (62)	26 (68)	165 (64)	42 (54)	6 (60)	12 (48)	2 (9)	14 (19)	76 (37)	241 (52)
2	Measure to address international logistics disruption/increasing transportation costs	7 (70)	4 (40)	18 (49)	14 (39)	7 (39)	21 (50)	29 (45)	16 (42)	116 (45)	42 (54)	3 (30)	9 (36)	9 (39)	9 (13)	72 (35)	188 (41)
3	Increase and decrease in demand	6 (60)	3 (30)	11 (30)	13 (36)	6 (33)	15 (36)	13 (20)	8 (21)	75 (29)	26 (33)	2 (20)	4 (16)	7 (30)	10 (14)	49 (24)	124 (27)
4	Measure to address rising labor wage	4 (40)	1 (10)	9 (24)	8 (22)	3 (17)	10 (24)	13 (20)	8 (21)	56 (22)	11 (14)	1 (10)	4 (16)	5 (22)	19 (26)	40 (19)	96 (21)
5	Geopolitical risks	1 (10)	2 (20)	7 (19)	3 (8)	5 (28)	15 (36)	12 (18)	12 (32)	57 (22)	20 (26)	0 (0)	1 (4)	3 (13)	8 (11)	32 (15)	89 (19)
6	The company has not considered a review in particular	0 (0)	1 (10)	3 (8)	4 (11)	3 (17)	2 (5)	9 (14)	5 (13)	27 (11)	5 (6)	1 (10)	8 (32)	5 (22)	30 (42)	49 (24)	76 (16)
7	Request from trading partners	1 (10)	0 (0)	4 (11)	11 (31)	1 (6)	5 (12)	8 (12)	2 (5)	32 (13)	24 (31)	1 (10)	2 (8)	2 (9)	6 (8)	35 (17)	67 (14)
8	Decarbonization movement towards carbon neutrality	1 (10)	1 (10)	9 (24)	4 (11)	4 (22)	7 (17)	9 (14)	6 (16)	41 (16)	12 (15)	0 (0)	1 (4)	4 (17)	6 (8)	23 (11)	64 (14)
9	Request from the parent company	2 (20)	2 (20)	8 (22)	6 (17)	0 (0)	13 (31)	9 (14)	2 (5)	42 (16)	9 (12)	1 (10)	1 (4)	2 (9)	7 (10)	20 (10)	62 (13)
10	Risks of natural disaster	2 (20)	0 (0)	2 (5)	3 (8)	2 (11)	6 (14)	9 (14)	8 (21)	32 (13)	6 (8)	1 (10)	1 (4)	2 (9)	3 (4)	13 (6)	45 (10)
11	Advancement of digital technology (e.g. IoT, cloud technology, blockchain, etc.)	1 (10)	0 (0)	5 (14)	3 (8)	2 (11)	2 (5)	1 (2)	3 (8)	17 (7)	4 (5)	0 (0)	1 (4)	5 (22)	11 (15)	21 (10)	38 (8)
12	Human rights risks	2 (20)	2 (20)	3 (8)	1 (3)	1 (6)	1 (2)	3 (5)	1 (3)	14 (5)	4 (5)	0 (0)	1 (4)	0 (0)	6 (8)	11 (5)	25 (5)
-	Others	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (1)	0 (0)	0 (0)	0 (0)	1 (1)	2 (1)	2 (0)
	Total	33	22	106	84	45	132	155	97	674	206	16	45	46	130	443	1,117
	No. of firms	10	10	37	36	18	42	65	38	256	78	10	25	23	72	208	464

### (2) Issues Surrounding Supply Chain Review (multiple answers)

As for the issues the companies are facing when conducting supply chain review, the most common issue is “Difficulty in finding new trading partners” (53%), followed by “Unable to change trading partners easily even if a problem occurs” (35%) and “Unable to foresee results that could offset the costs” (24%). (Table 12-2)

(Table 12-2) Issues Surrounding Supply Chain Review (Multiple Answers)

Ranking		Manufacturing									Non-manufacturing					Total	Unit No. of firms and (%)
		Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Construction/Civil engineering	Transportation/Communication	Others		
1	Difficulty in finding new trading partners	3 (30)	5 (50)	18 (51)	19 (56)	7 (34)	24 (57)	31 (50)	26 (72)	133 (55)	30 (43)	4 (44)	14 (67)	4 (25)	29 (62)	81 (50)	214 (53)
2	Unable to change trading partners easily even if a problem occurs	2 (20)	2 (20)	13 (37)	10 (29)	6 (46)	20 (48)	30 (48)	13 (36)	96 (40)	30 (43)	1 (11)	4 (19)	5 (31)	4 (9)	44 (27)	140 (35)
3	Unable to foresee results that could offset the costs	3 (30)	0 (0)	9 (26)	9 (26)	3 (23)	13 (31)	17 (27)	8 (22)	62 (26)	15 (21)	1 (11)	5 (24)	3 (19)	10 (21)	34 (21)	96 (24)
4	Difficulty in grasping the overall supply chain	5 (50)	4 (40)	10 (29)	5 (15)	3 (23)	14 (33)	10 (16)	3 (8)	54 (22)	16 (23)	4 (44)	2 (10)	3 (19)	8 (17)	33 (20)	87 (21)
5	Unable to secure necessary personnel/budget	1 (10)	0 (0)	2 (6)	2 (6)	0 (0)	4 (10)	6 (10)	6 (17)	21 (9)	1 (1)	1 (11)	1 (5)	1 (6)	6 (13)	10 (6)	31 (8)
6	Not knowing ways to concretely carry out a review	0 (0)	0 (0)	2 (6)	1 (3)	0 (0)	1 (2)	0 (0)	1 (3)	5 (2)	10 (14)	0 (0)	4 (19)	1 (6)	3 (6)	18 (11)	23 (6)
-	Others	0 (0)	1 (10)	1 (3)	0 (0)	0 (0)	1 (2)	2 (3)	0 (0)	5 (2)	1 (1)	0 (0)	0 (0)	1 (6)	1 (2)	3 (2)	8 (2)
	Total	14	12	55	46	19	77	96	57	376	103	11	30	18	61	223	599
	No. of firms	10	10	35	34	13	42	62	36	242	70	9	21	16	47	163	405

### (3) Outlook on Future Business Activities

Having considered supply chain adjustment, most of the responding companies indicated that they will “Maintain current business size” (66%) while 25% think they might “Expand the business”. Moreover, 8% hinted that they may “Expand the business (relocation from other countries to Thailand)”. (Table 12-3)

(Table 12-3) Outlook on Future Business Activities

Ranking		Manufacturing									Non-manufacturing					Total	
		Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Construction/Civil engineering	Transportation/Communication	Others		Non-manufacturing sector total
1	Maintain current business size	6 (60)	8 (80)	20 (59)	26 (72)	7 (44)	27 (64)	49 (78)	20 (54)	163 (66)	47 (62)	5 (63)	15 (68)	16 (73)	42 (69)	125 (66)	288 (66)
2	Expand the business	2 (20)	0 (0)	10 (29)	9 (25)	6 (38)	8 (19)	9 (14)	11 (30)	55 (22)	25 (33)	2 (25)	6 (27)	5 (23)	15 (25)	53 (28)	108 (25)
3	Expand the business (relocation from other countries to Thailand)	0 (0)	2 (20)	4 (12)	0 (0)	3 (19)	7 (17)	4 (6)	5 (14)	25 (10)	4 (5)	1 (13)	0 (0)	1 (5)	3 (5)	9 (5)	34 (8)
4	Downsize the business	1 (10)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	1 (2)	1 (3)	4 (2)	0 (0)	0 (0)	1 (5)	0 (0)	1 (2)	2 (1)	6 (1)
5	Downsize the business (relocation from Thailand to other countries)	1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)
	No. of firms	10	10	34	36	16	42	63	37	248	76	8	22	22	61	189	437

## 13. ACTIVITIES RELATED TO CARBON NEUTRALITY

### (1) The Company’s Policy Concerning Carbon Neutrality

In response to a question regarding whether the local branch of the company has a policy concerning carbon neutrality, most firms indicated that “A policy is expected to be considered based on the headquarters' instruction or trading partner's request” (40%). Meanwhile, 32% admitted that “Nothing has been decided at the moment” and 19% stated that “A concrete policy has been decided”. (Table 13-1)

(Table 13-1) Policy Concerning Carbon Neutrality

Ranking		Manufacturing									Non-manufacturing					Total	
		Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Construction/Civil engineering	Transportation/Communication	Others		Non-manufacturing sector total
1	A policy is expected to be considered based on the headquarters' instruction or trading partner's request	4 (40)	0 (0)	16 (44)	21 (57)	6 (33)	22 (52)	21 (32)	15 (39)	105 (41)	38 (48)	5 (50)	11 (42)	10 (38)	26 (29)	90 (39)	195 (40)
2	Nothing has been decided at the moment	5 (50)	3 (30)	7 (19)	7 (19)	6 (33)	5 (12)	10 (15)	12 (32)	55 (21)	31 (39)	5 (50)	11 (42)	10 (38)	42 (47)	99 (43)	154 (32)
3	A concrete policy has been decided	1 (10)	5 (50)	7 (19)	6 (16)	3 (17)	11 (26)	27 (42)	9 (24)	69 (27)	4 (5)	0 (0)	3 (12)	4 (15)	11 (12)	22 (10)	91 (19)
4	A concrete policy has not been set but it will be decided soon	0 (0)	2 (20)	6 (17)	3 (8)	3 (17)	4 (10)	7 (11)	2 (5)	27 (11)	6 (8)	0 (0)	1 (4)	2 (8)	10 (11)	19 (8)	46 (9)
	No. of firms	10	10	36	37	18	42	65	38	256	79	10	26	26	89	230	486

## (2) Opinion towards Efforts to Achieve Carbon Neutrality (multiple answers)

Regarding the company's opinion towards efforts to achieve carbon neutrality, "Reducing greenhouse gas emissions according to standards specified by environmental laws/regulations at that time" (36%) is the most popular choice among the respondents, followed by "Reducing greenhouse gas emissions at an extent that is possible within the scope of daily business activities" (33%) and "Reducing greenhouse gas emissions according to standards required by trading partners" (24%). (Table 13-2)

(Table 13-2) Opinion towards Efforts to Achieve Carbon Neutrality (Multiple Answers)

Ranking		Manufacturing										Non-manufacturing						Total
		Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Construction/Civil engineering	Transportation/Communication	Others	Non-manufacturing sector total		
1	Reducing greenhouse gas emissions according to standards specified by environmental laws/regulations at that time	5 (50)	2 (25)	25 (68)	10 (27)	5 (28)	16 (39)	32 (49)	10 (26)	105 (41)	26 (34)	2 (20)	9 (38)	9 (36)	21 (24)	67 (30)	172 (36)	
2	Reducing greenhouse gas emissions at an extent that is possible within the scope of daily business activities	0 (0)	2 (25)	10 (27)	6 (16)	5 (28)	12 (29)	15 (23)	13 (34)	63 (25)	32 (42)	5 (50)	11 (46)	12 (48)	33 (38)	93 (42)	156 (33)	
3	Reducing greenhouse gas emissions according to standards required by trading partners	1 (10)	2 (25)	10 (27)	14 (38)	3 (17)	8 (20)	22 (34)	7 (18)	67 (26)	25 (32)	1 (10)	8 (33)	6 (24)	9 (10)	49 (22)	116 (24)	
4	Reducing greenhouse gas emissions in an amount that exceeds standards specified by environmental laws/regulations at that time or standards required by trading partners	3 (30)	4 (50)	10 (27)	13 (35)	4 (22)	9 (22)	19 (29)	7 (18)	69 (27)	6 (8)	1 (10)	0 (0)	5 (20)	11 (13)	23 (10)	92 (19)	
5	The company does not feel the necessity of taking any initiative in particular	2 (20)	0 (0)	2 (5)	2 (5)	2 (11)	2 (5)	2 (3)	2 (5)	14 (6)	6 (8)	1 (10)	2 (8)	3 (12)	14 (16)	26 (12)	40 (8)	
6	Entering a business that contributes to greenhouse gas reduction and positioning it as a new core business	0 (0)	2 (25)	1 (3)	1 (3)	3 (17)	3 (7)	3 (5)	0 (0)	13 (5)	6 (8)	1 (10)	0 (0)	0 (0)	10 (11)	17 (8)	30 (6)	
7	The company does not feel the necessity of taking additional initiatives since the current efforts are adequate	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	3 (8)	4 (2)	2 (3)	0 (0)	1 (4)	0 (0)	2 (2)	5 (2)	9 (2)	
-	Others	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	1 (2)	1 (3)	3 (1)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	1 (0)	4 (1)	
	Total	11	12	58	47	22	50	95	43	338	103	11	32	35	100	281	619	
	No. of firms	10	8	37	37	18	41	65	38	254	77	10	24	25	87	223	477	

## (3) Activities Related to Carbon Neutrality (multiple answers)

The Japanese companies' top choice of carbon neutrality-related activities is "Replacing or upgrading to energy-saving equipment" (46%), followed by "Introducing renewable energy such as generating electricity with solar energy" (37%) and "Promoting proper disposal and reduction of industrial waste/recycling of recyclable waste" (31%). (Table 13-3)

(Table 13-3) Activities Related to Carbon Neutrality (Multiple Answers)

Ranking		Manufacturing										Non-manufacturing						Total
		Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Construction/Civil engineering	Transportation/Communication	Others	Non-manufacturing sector total		
1	Replacing or upgrading to energy-saving equipment	5 (71)	4 (50)	20 (57)	24 (65)	8 (50)	27 (71)	41 (65)	21 (57)	150 (62)	15 (24)	2 (29)	5 (23)	2 (11)	18 (28)	42 (24)	192 (46)	
2	Introducing renewable energy such as generating electricity with solar energy	7 (100)	7 (88)	15 (43)	19 (51)	5 (31)	19 (50)	42 (67)	18 (49)	132 (55)	5 (8)	2 (29)	2 (9)	7 (37)	7 (11)	23 (13)	155 (37)	
3	Promoting proper disposal and reduction of industrial waste/recycling of recyclable waste	1 (14)	3 (38)	14 (40)	11 (30)	6 (38)	15 (39)	23 (37)	13 (35)	86 (36)	16 (26)	2 (29)	7 (32)	2 (11)	17 (26)	44 (25)	130 (31)	
4	Grasping the amount of the company's greenhouse gas emissions	2 (29)	5 (63)	13 (37)	13 (35)	5 (31)	18 (47)	33 (52)	11 (30)	100 (41)	9 (15)	0 (0)	1 (5)	2 (11)	15 (23)	27 (15)	127 (31)	
5	Organizing/participating in seminars or webinars concerning approaches towards carbon neutrality	1 (14)	1 (13)	10 (29)	11 (30)	5 (31)	12 (32)	20 (32)	8 (22)	68 (28)	16 (26)	2 (29)	8 (36)	6 (32)	17 (26)	49 (28)	117 (28)	
6	Optimizing the operation of equipment	3 (43)	2 (25)	11 (31)	11 (30)	4 (25)	18 (47)	27 (43)	13 (35)	89 (37)	2 (3)	1 (14)	4 (18)	5 (26)	15 (23)	27 (15)	116 (28)	
7	Appointing a person in charge or establishing a department responsible for environmental activities	3 (43)	0 (0)	11 (31)	7 (19)	4 (25)	17 (45)	30 (48)	10 (27)	82 (34)	9 (15)	1 (14)	1 (5)	4 (21)	14 (22)	29 (17)	111 (27)	
8	Setting behavioral targets related to greenhouse gas	2 (29)	3 (38)	10 (29)	6 (16)	6 (38)	19 (50)	32 (51)	8 (22)	86 (36)	6 (10)	1 (14)	1 (5)	3 (16)	9 (14)	20 (11)	106 (25)	
9	Using raw materials and parts with low environmental impact	3 (43)	3 (38)	8 (23)	3 (8)	2 (13)	5 (13)	6 (10)	9 (24)	39 (16)	11 (18)	1 (14)	5 (23)	3 (16)	8 (12)	28 (16)	67 (16)	
10	Introducing electric cars/fuel cell electric cars/hybrid cars	0 (0)	1 (13)	6 (17)	3 (8)	2 (13)	5 (13)	15 (24)	7 (19)	39 (16)	9 (15)	0 (0)	1 (5)	7 (37)	7 (11)	24 (14)	63 (15)	
11	Promoting R&D and investment in environmental technology	1 (14)	2 (25)	4 (11)	1 (3)	1 (6)	1 (3)	2 (3)	0 (0)	12 (5)	3 (5)	0 (0)	2 (9)	0 (0)	5 (8)	10 (6)	22 (5)	
12	Utilizing the emissions trading system	0 (0)	2 (25)	0 (0)	0 (0)	0 (0)	5 (13)	5 (8)	1 (3)	13 (5)	3 (5)	0 (0)	0 (0)	1 (5)	2 (3)	6 (3)	19 (5)	
-	Others	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	2 (5)	3 (1)	4 (6)	0 (0)	2 (9)	0 (0)	4 (6)	10 (6)	13 (3)	
	Total	28	33	122	109	48	161	277	121	899	108	12	39	42	138	339	1,238	
	No. of firms	7	8	35	37	16	38	63	37	241	62	7	22	19	65	175	416	

#### (4) Issues Surrounding Efforts to Achieve Carbon Neutrality (multiple answers)

On the other hand, the top issue affecting the firm's efforts to achieve carbon neutrality is that they are "Unable to pass through costs to prices of products/services" (44%). Moreover, they have "Insufficient specialized knowledge and personnel, including know how for the implementation" (41%) and they also indicated that they are "Unable to foresee results that could offset the costs" (36%). (Table 13-4)

(Table 13-4) Issues Surrounding Efforts to Achieve Carbon Neutrality (Multiple Answers)

Ranking		Manufacturing										Non-manufacturing					Total
		Food	Textile	Chemical	Steel/Non-ferrous metal	General machinery	Electrical/Electronic machinery	Transportation machinery	Others	Manufacturing sector total	Trading	Retail	Construction/Civil engineering	Transportation/Communication	Others	Non-manufacturing sector total	
1	Unable to pass through costs to prices of products/services	6 (67)	3 (43)	21 (60)	22 (59)	7 (47)	20 (54)	29 (48)	23 (61)	131 (55)	21 (30)	2 (33)	8 (35)	14 (64)	15 (21)	60 (31)	191 (44)
2	Insufficient specialized knowledge and personnel, including know how for the implementation	3 (33)	3 (43)	16 (46)	15 (41)	10 (67)	16 (43)	30 (49)	15 (39)	108 (45)	22 (31)	3 (50)	13 (57)	8 (36)	24 (33)	70 (36)	178 (41)
3	Unable to foresee results that could offset the costs	3 (33)	2 (29)	18 (51)	12 (32)	7 (47)	18 (49)	26 (43)	13 (34)	99 (41)	23 (33)	1 (17)	3 (13)	10 (45)	19 (26)	56 (29)	155 (36)
3	Not knowing the level to which the company needs to take actions	4 (44)	1 (14)	14 (40)	12 (32)	4 (27)	14 (38)	19 (31)	10 (26)	78 (33)	24 (34)	2 (33)	9 (39)	10 (45)	32 (44)	77 (40)	155 (36)
5	The priority is low	2 (22)	0 (0)	5 (14)	5 (14)	0 (0)	1 (3)	3 (5)	3 (8)	19 (8)	16 (23)	1 (17)	4 (17)	4 (18)	12 (17)	37 (19)	56 (13)
6	The necessity to develop technology that is difficult to carry out by one company alone	2 (22)	2 (29)	3 (9)	3 (8)	1 (7)	2 (5)	4 (7)	5 (13)	22 (9)	4 (6)	0 (0)	3 (13)	1 (5)	9 (13)	17 (9)	39 (9)
7	Unable to bear the costs due to inadequate funding	1 (11)	0 (0)	2 (6)	4 (11)	1 (7)	3 (8)	3 (5)	5 (13)	19 (8)	3 (4)	2 (33)	3 (13)	1 (5)	3 (4)	12 (6)	31 (7)
8	Building consensus within the company	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	3 (8)	3 (5)	2 (5)	9 (4)	2 (3)	1 (17)	3 (13)	2 (9)	4 (6)	12 (6)	21 (5)
9	Unable to allocate time	0 (0)	1 (14)	2 (6)	0 (0)	0 (0)	2 (5)	3 (5)	1 (3)	9 (4)	3 (4)	0 (0)	2 (9)	2 (9)	4 (6)	11 (6)	20 (5)
10	Not knowing which organization to consult	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	3 (8)	2 (3)	1 (3)	7 (3)	2 (3)	0 (0)	2 (9)	0 (0)	2 (3)	6 (3)	13 (3)
-	Others	0 (0)	1 (14)	0 (0)	1 (3)	0 (0)	0 (0)	1 (2)	1 (3)	4 (2)	0 (0)	0 (0)	0 (0)	0 (0)	1 (1)	1 (1)	5 (1)
	Total	21	13	82	75	30	82	123	79	505	120	12	50	52	125	359	864
	No. of firms	9	7	35	37	15	37	61	38	239	70	6	23	22	72	193	432