

**NSG**

**GROUP**

# NSG Group

## 2022/3 Annual Results

(from 1 April 2021 to 31 March 2022)

Nippon Sheet Glass Company, Limited  
12 May 2022

## **Shigeki Mori**

Chief Executive Officer

## **Munehiro Hosonuma**

Chief Operating Officer

## **Reiko Kusunose**

Chief Financial Officer

# Agenda

1. Financial Year ended 31 March 2022 Financial Results
2. Forecast for Financial Year ending 31 March 2023
3. Update of Transformation Initiatives under Revival Plan 24 (RP24)
4. Progress of Sustainability
5. Summary

# 1. Financial Year ended 31 March 2022 Financial Results

# Consolidated Income Statement

**Continued profit with strong Architectural and Technical Glass performance. Achieved full-year forecast in revenue and operating profit. Net profit for the first time in these three years, despite of impairment losses of debt and equity investments to JV in Russia**

(JPY bn)	Q4 (3 months)			Cumulative (12 months)			2022/3 Full-year Forecast
	2021/3	2022/3	Change	2021/3	2022/3	Change	
<b>Revenue</b>	141.9	<b>157.6</b>	15.7	499.2	<b>600.6</b>	101.3	590.0
<b>Operating profit</b>	5.1	<b>5.5</b>	0.4	13.1	<b>20.0</b>	6.9	20.0
<b>ROS: Return on sales (%)</b>	3.6%	<b>3.5%</b>	(0.1) pt	2.6%	<b>3.3%</b>	+0.7pt	3.4%
Exceptional items (COVID-19 related)	(2.1)	-	2.1	(16.1)	-	16.1	-
<b>Operating profit/(loss) after COVID-19 related exceptional items</b>	3.0	<b>5.5</b>	2.5	(3.0)	<b>20.0</b>	23.0	20.0
Exceptional items (Other)	(6.1)	<b>(0.7)</b>	5.4	(5.9)	<b>3.6</b>	9.5	4.0
<b>Operating profit/(loss)loss after exceptional items</b>	(3.1)	<b>4.8</b>	7.8	(8.9)	<b>23.6</b>	32.5	24.0
Finance expenses (net)	(3.5)	<b>(3.4)</b>	0.1	(11.0)	<b>(12.5)</b>	(1.4)	(13.0)
Impairment of financial receivables owed by joint ventures and associates	-	<b>(3.4)</b>	(3.4)	-	<b>(3.4)</b>	(3.4)	-
Share of JVs and associates' profits	1.3	<b>1.9</b>	0.6	2.2	<b>7.5</b>	5.3	7.0
Other gains/(losses) on equity method investments	0.6	<b>(3.4)</b>	(4.0)	0.6	<b>(3.4)</b>	(4.0)	-
<b>Profit/(loss) before taxation</b>	(4.7)	<b>(3.6)</b>	1.1	(17.2)	<b>11.9</b>	29.0	18.0
<b>Profit/(loss) for the period</b>	(2.8)	<b>(3.8)</b>	(1.0)	(16.3)	<b>6.8</b>	23.1	12.0
<b>Net profit/(loss) *</b>	(3.0)	<b>(4.5)</b>	(1.5)	(16.9)	<b>4.1</b>	21.1	10.0
<b>EBITDA</b>	14.5	<b>14.4</b>	(0.1)	46.8	<b>56.7</b>	9.8	

Q4 revenue and operating profit reduced in Automotive. Cumulative profit reduction in Automotive was offset by Architectural and Technical Glass performance to continuous profit in the whole group

【Operating Profit : vs PY】

(JPY bn)	Q4	Cum.
Architectural	3.6	12.5
Automotive	(4.9)	(9.7)
Technical	(0.1)	3.2
Others	1.8	1.0
<b>Grp. Total</b>	<b>0.4</b>	<b>6.9</b>

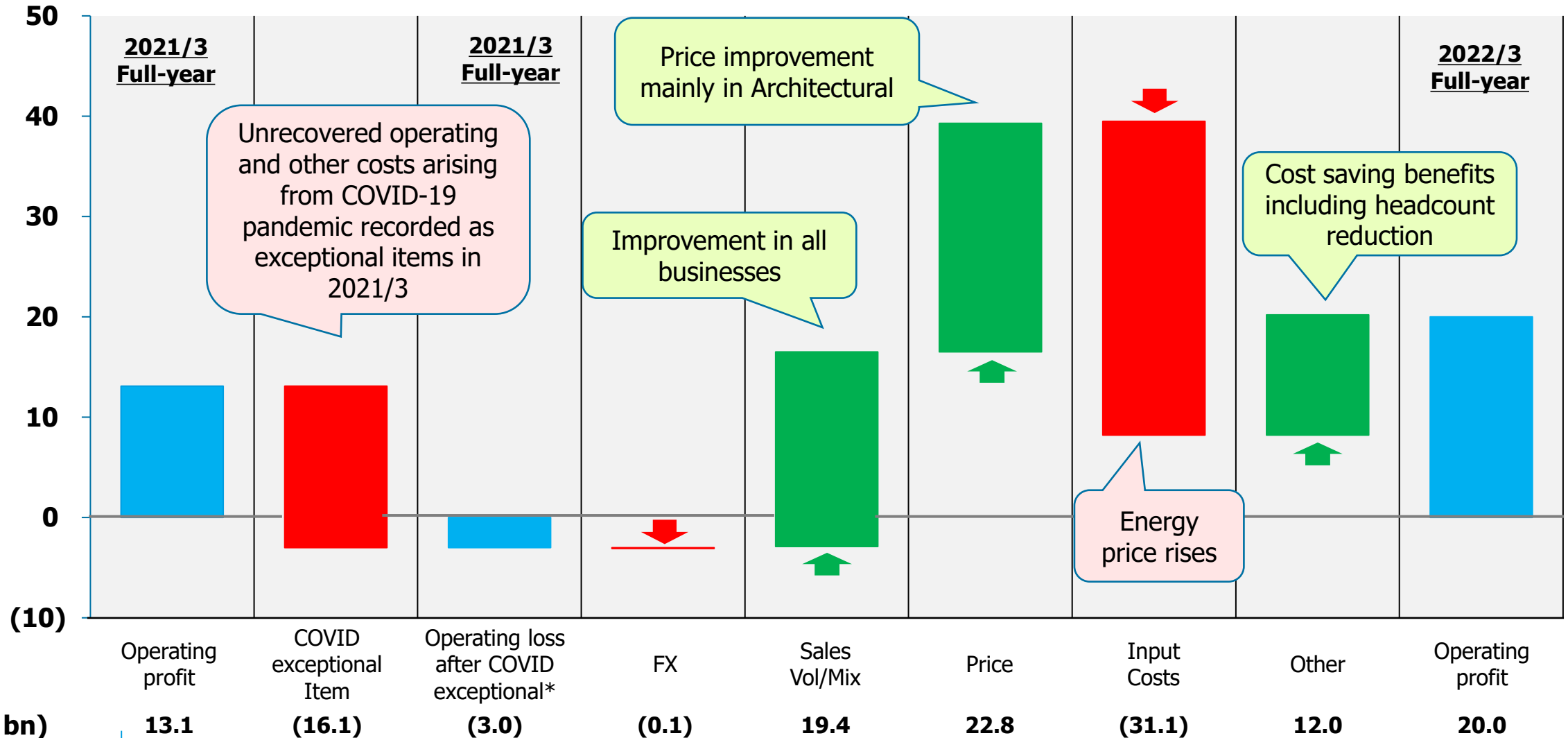
Impairment loss of debt investment (JPY (3.4) bn) to JV in Russia

Strong JV results especially in Brazil

Partial impairment loss of equity investment (JPY (3.4) bn) to JV in Russia

# Change Analysis – Operating profit (Cumulative) NSG GROUP

Improvement by JPY 23.0 bn with demand recovery, price increases, and cost savings offsetting input cost rises



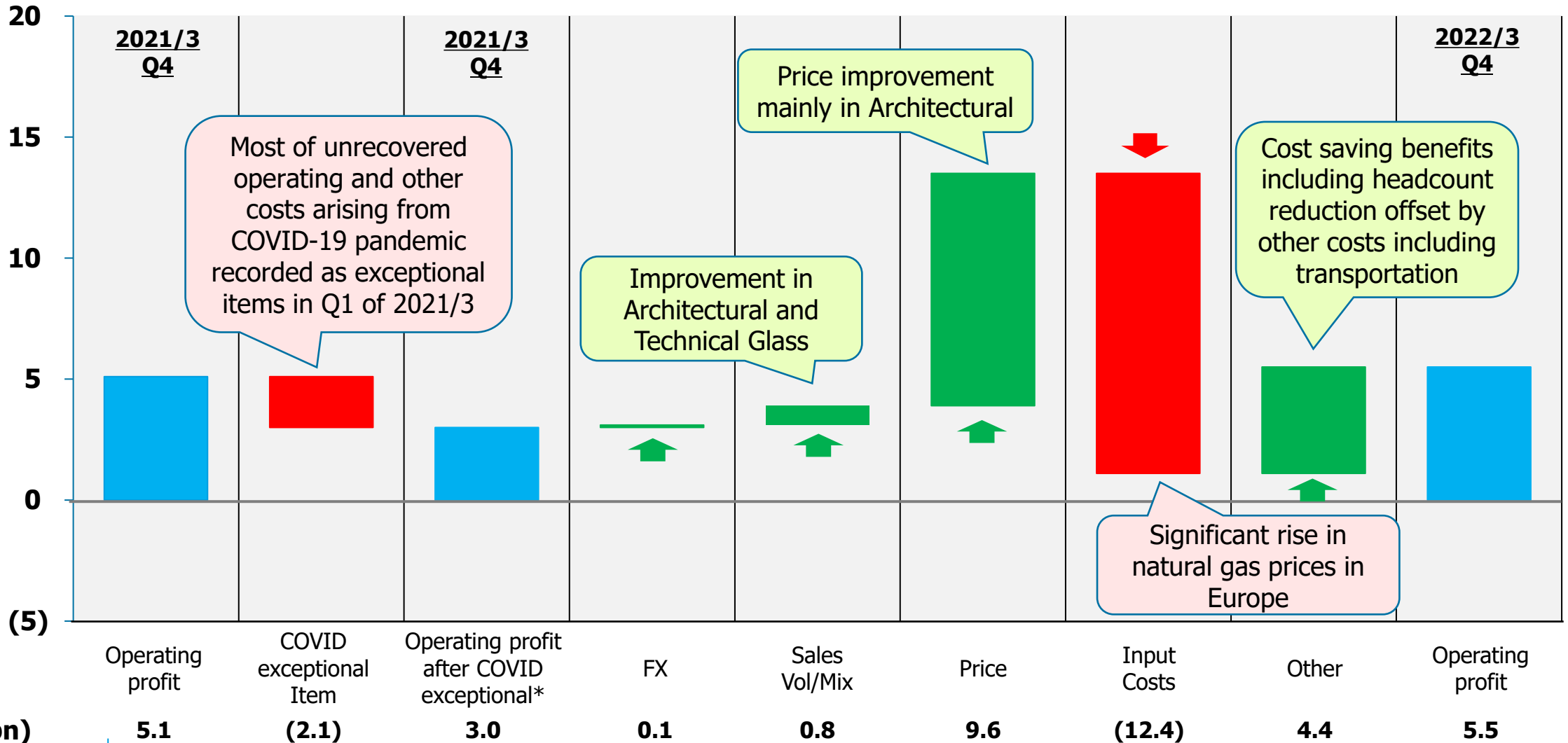
(JPY bn)

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\*Operating loss after COVID-19 related exceptional items

# Change Analysis – Operating profit (Quarter 4 only)

**Improved profit with cost savings and price increases more than offsetting higher input costs**





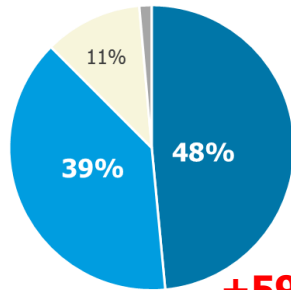
# Energy Cost Breakdown (2021/3→2022/3)

Cumulative significant increase in overall energy cost, due to improving volumes and higher energy input prices. Particularly driven by increasing cost of natural gas, with this now accounting for 58% of the Group's total energy spend.

Most significant impacts in Europe by region, and in Architectural by business

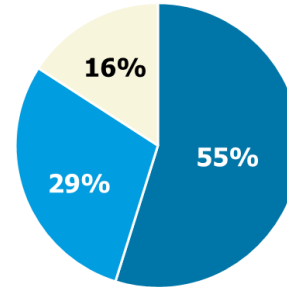
## 2021/3 (Full-year)

**Group (by Energy)**



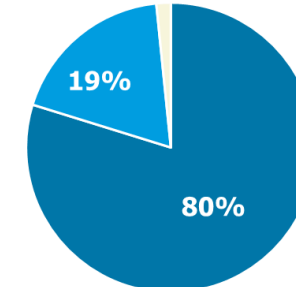
**+59%  
Natural gas+89%**

**Group natural gas (by Region)**

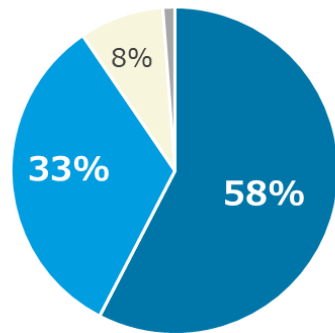


**Europe+138%**

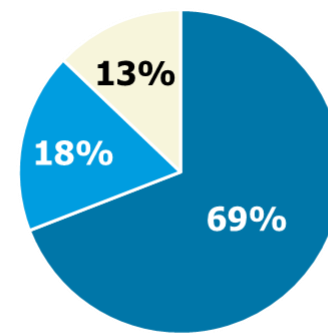
**Group natural gas (by business)**



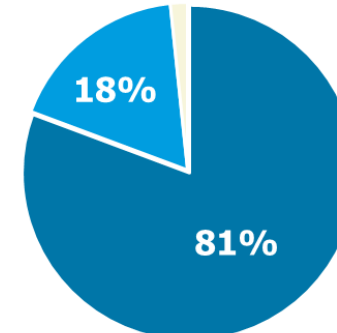
**Architectural+91%**



■ Natural Gas ■ Electricity  
■ Oil ■ Others



■ Europe ■ Asia ■ Americas

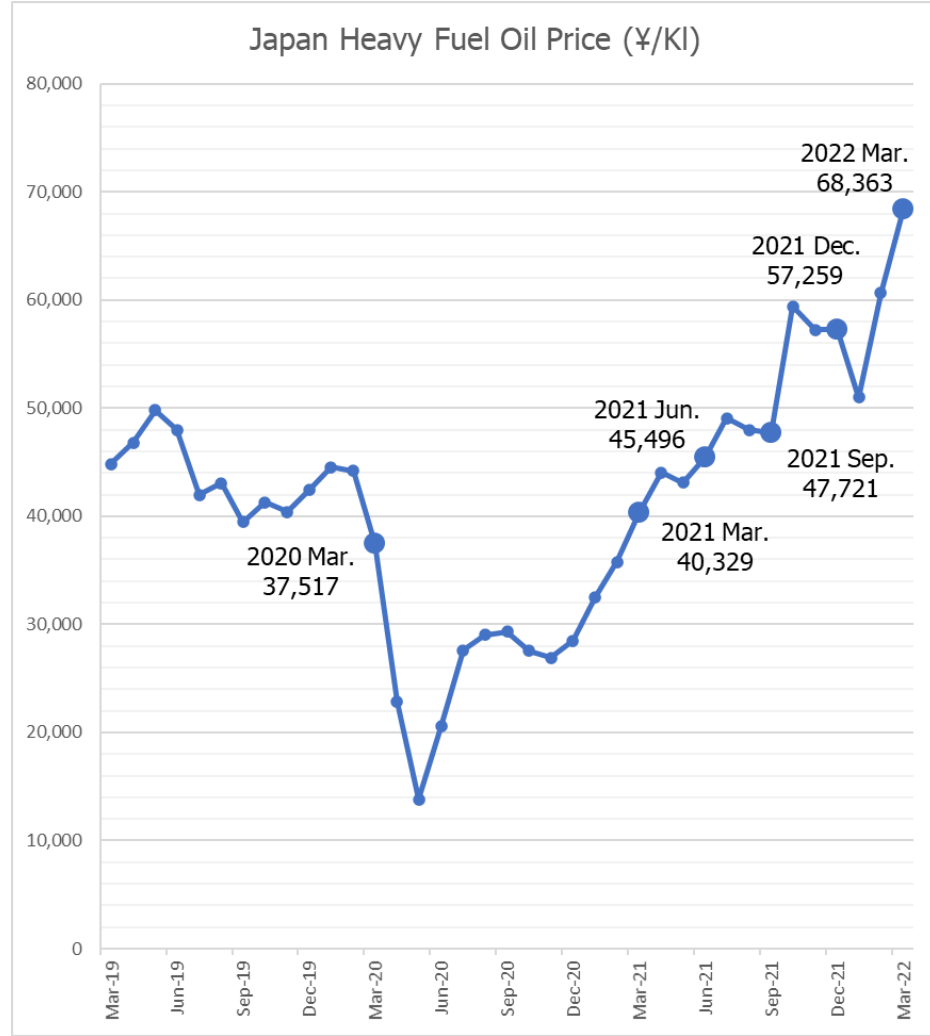
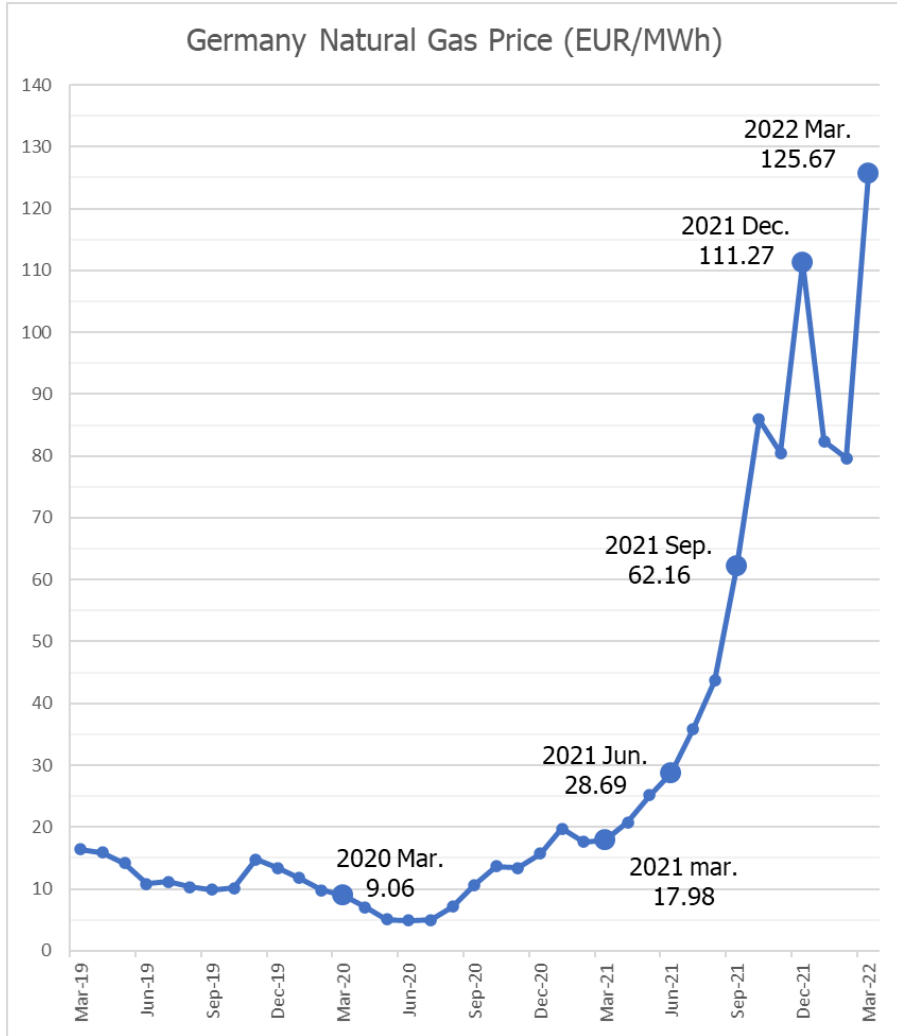


■ Architectural ■ Automotive ■ Technical

## 2022/3 (Full-year)

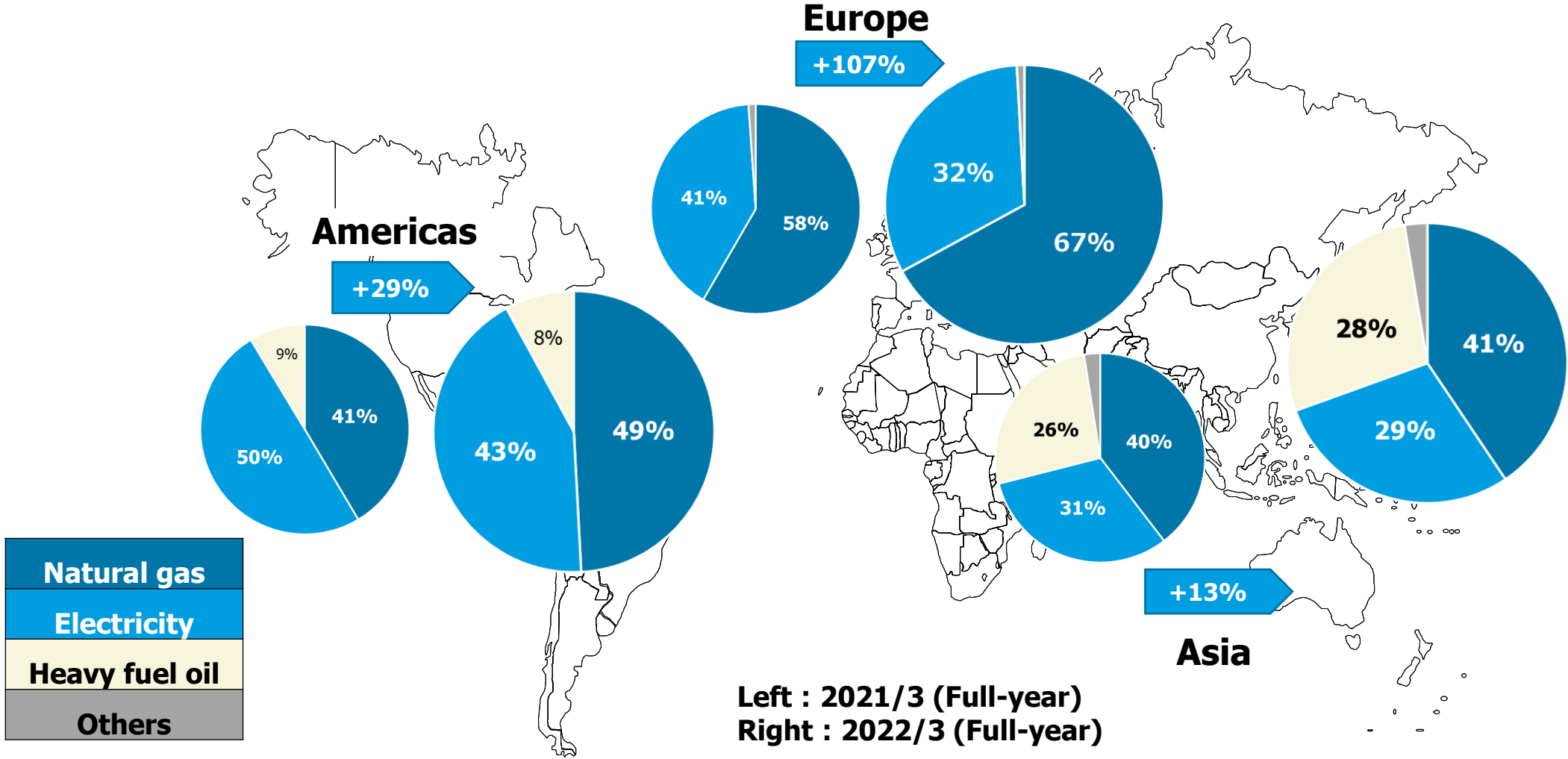
# Energy Price Movement

**Mar. 2022 German natural gas price hiked 7.0x from Mar. 2021.  
Japanese heavy fuel oil price increased by 70%**



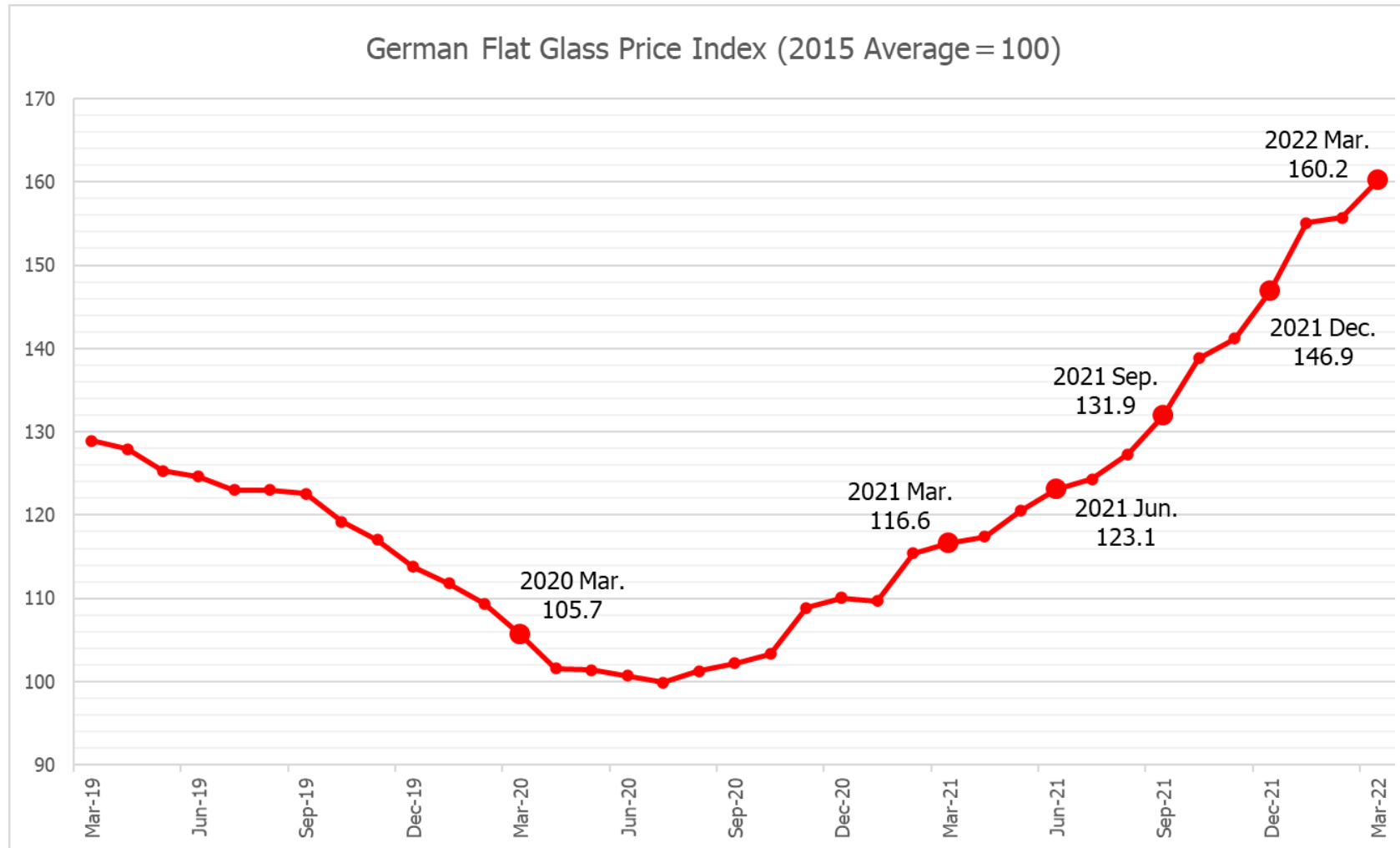
# Energy Cost Breakdown (by region)

Significant impact by natural gas price hike in Europe and heavy fuel oil price increase in Asia



# Glass Market Price Movement

**Mar. 2022 German glass price increased by 37% form Mar. 2021.**  
**Mitigating impact by higher input costs especially natural gas**



# Consolidated Balance Sheet

**Improvement in shareholders' equity ratio above 15% with positive factors including net profit generation. Achieved a financial target of RP24 as a single year**

(JPY bn)	31 March 2021	31 March 2022	Change	
<b>Total Assets</b>	<b>825.0</b>	<b>939.3</b>	<b>114.3</b>	Mainly increase in tangible fixed assets, value of financial derivative assets, and retirement benefit asset
Non-current assets	575.0	637.0	62.1	
Current assets	250.0	302.2	52.3	
<b>Total Liabilities</b>	<b>745.2</b>	<b>769.9</b>	<b>24.7</b>	Mainly increase in inventory and value of financial derivative assets
Current liabilities	287.8	306.7	18.9	Mainly increase in payables
Non-current liabilities	457.4	463.2	5.8	
<b>Total Equity</b>	<b>79.8</b>	<b>169.4</b>	<b>89.6</b>	Recovered above 15% with net profit, positive revaluation of energy hedge derivatives, and weaker JPY
Shareholders' equity	62.9	145.3	82.4	
<b>Shareholders' Equity Ratio</b>	<b>7.6%</b>	<b>15.5%</b>	<b>+7.9pt</b>	Decreased with mainly increase in value of financial derivative assets
<b>Net Debt</b>	<b>411.7</b>	<b>365.2</b>	<b>(46.6)</b>	

# Consolidated Statement of Cash Flows

**Large improvement to inflow in cumulative free cash flows from 2021/3 with recovering profits, strict cash management, and business disposal income.  
Achieved a financial target of RP24 as a single year**

(JPY bn)	Q4 (3 months)			Full-year (12 months)		
	2021/3	2022/3	Change	2021/3	2022/3	Change
<b>Net cash flows from operating activities</b>	<b>16.4</b>	<b>23.9</b>	<b>7.6</b>	<b>21.1</b>	<b>45.1</b>	<b>24.0</b>
included above: Net change in working capital	9.7	14.4	4.7	5.1	5.7	0.6
<b>Net cash flows from investing activities</b>	<b>7.7</b>	<b>(2.7)</b>	<b>(10.4)</b>	<b>(25.6)</b>	<b>(22.8)</b>	<b>2.8</b>
included above: Purchase of property, plant and equipment	(8.7)	(7.1)	1.6	(39.2)	(33.1)	6.1
<b>Free cash flow</b>	<b>24.1</b>	<b>21.2</b>	<b>(2.8)</b>	<b>(4.5)</b>	<b>22.3</b>	<b>26.8</b>
<b>Net cash flows from financing activities</b>	<b>(14.8)</b>	<b>(8.9)</b>	<b>5.9</b>	<b>13.5</b>	<b>(20.8)</b>	<b>(34.4)</b>
<b>(Decrease)/increase in cash and cash equivalents</b>	<b>9.3</b>	<b>12.4</b>	<b>3.1</b>	<b>9.0</b>	<b>1.5</b>	<b>(7.6)</b>
<b>Cash and cash equivalents at the end of the period</b>				<b>53.5</b>	<b>60.0</b>	<b>6.5</b>

Significant year-on-year improvement with increased profit and strict cash management

Proceeds from Battery Separator business disposal (JPY 6.2 bn)

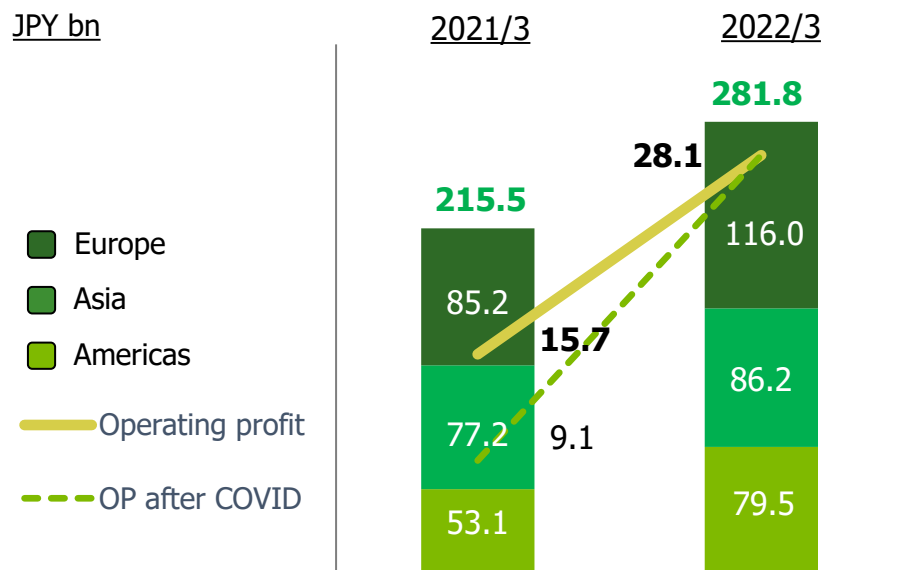
Significant improvement from 2021/3, achieving a financial target of RP24 as a single year

# Segmental Information

(JPY bn)	2020/3 Full-year			2021/3 Full-year				2022/3 Full-year			Change	
	Revenue	%	Operating profit	Revenue	%	Operating profit	Operating profit after COVID*	Revenue	%	Operating profit	Revenue	Operating Profit
<b>Architectural</b>	<b>233.7</b>	<b>42%</b>	<b>17.3</b>	<b>215.5</b>	<b>43%</b>	<b>15.7</b>	<b>9.2</b>	<b>281.8</b>	<b>47%</b>	<b>28.1</b>	<b>66.3</b>	<b>12.5</b>
Europe	87.1	16%		85.2	17%			116.0	19%		30.9	
Asia	91.4	16%		77.2	15%			86.2	14%		9.0	
Americas	55.2	10%		53.1	11%			79.5	13%		26.4	
<b>Automotive</b>	<b>281.0</b>	<b>51%</b>	<b>6.1</b>	<b>245.2</b>	<b>49%</b>	<b>1.8</b>	<b>(7.8)</b>	<b>276.2</b>	<b>46%</b>	<b>(7.9)</b>	<b>31.1</b>	<b>(9.7)</b>
Europe	119.8	22%		103.6	21%			116.7	19%		13.1	
Asia	67.1	12%		60.6	12%			60.4	10%		(0.2)	
Americas	94.1	17%		81.0	16%			99.2	17%		18.2	
<b>Technical Glass</b>	<b>40.1</b>	<b>7%</b>	<b>7.1</b>	<b>36.8</b>	<b>7%</b>	<b>6.7</b>	<b>6.5</b>	<b>39.8</b>	<b>7%</b>	<b>9.9</b>	<b>3.0</b>	<b>3.2</b>
Europe	7.1	1%		6.4	1%			7.9	1%		1.5	
Asia	31.7	6%		29.3	6%			30.6	5%		1.2	
Americas	1.3	0%		1.1	0%			1.3	0%		0.2	
<b>Other</b>	<b>1.4</b>	<b>0%</b>	<b>(7.5)</b>	<b>1.7</b>	<b>0%</b>	<b>(11.1)</b>	<b>(10.8)</b>	<b>2.7</b>	<b>0%</b>	<b>(10.1)</b>	<b>1.0</b>	<b>1.0</b>
<b>Total</b>	<b>556.2</b>	<b>100%</b>	<b>23.0</b>	<b>499.2</b>	<b>100%</b>	<b>13.1</b>	<b>(3.0)</b>	<b>600.6</b>	<b>100%</b>	<b>20.0</b>	<b>101.3</b>	<b>6.9</b>

# Architectural (Cum. Rev ▲, Profit ▲ : Q4 Rev ▲, Profit ▲)

Significantly improved revenue continued in all regions reflecting strong demand. Solid profit exceeding 2020/3, with prices increase and cost saving efforts offsetting higher energy prices



(JPY bn)	Cum. (12 months)	Q4 (3 months)			Full-year (12 months)		
		2020/3	2021/3	2022/3	Change	2021/3	2022/3
<b>Revenue</b>	<b>233.7</b>	<b>59.4</b>	<b>75.0</b>	<b>15.5</b>	<b>215.5</b>	<b>281.8</b>	<b>66.3</b>
Europe	87.1	24.6	31.8	7.3	85.2	116.0	30.9
Asia	91.4	18.9	21.5	2.6	77.2	86.2	9.0
Americas	55.2	15.9	21.6	5.6	53.1	79.5	26.4
<b>OP</b>	<b>17.3</b>	<b>4.1</b>	<b>7.7</b>	<b>3.6</b>	<b>15.7</b>	<b>28.1</b>	<b>12.5</b>
<b>OP after COVID*</b>	<b>16.7</b>	<b>3.4</b>	<b>7.7</b>	<b>4.3</b>	<b>9.1</b>	<b>28.1</b>	<b>19.0</b>

## Europe (Cum. Rev ▲, Profit ▲ : Q4 Rev ▲, Profit ▲)

- Improved sales volume and prices with demand above capacity
- Profitability improving strongly from Q3 to Q4 with energy surcharge introduction, despite continued higher input and logistics costs

## Asia (Cum. Rev ▲, Profit ▲ : Q4 Rev ▲, Profit ▲)

- Sales volume and price recovering in Japan. Good performance maintained in other countries with recovery after COVID-19
- Robust demand for solar energy glass

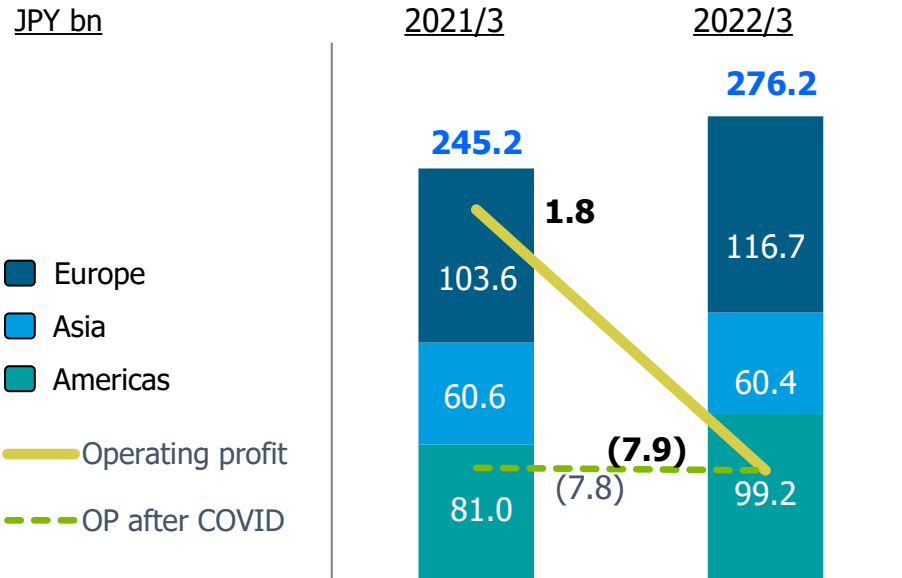
## Americas (Cum. Rev ▲, Profit ▲ : Q4 Rev ▲, Profit ▲)

- Sales volume and price increased, although shipments constrained due to cold repair and shortages of transportation capacity in North America.
- Continued strong sales of solar energy glass
- Higher shipment volumes reflecting strong demand in South America



# Automotive (Cum. Rev ▲, Profit ▼ : Q4 Rev ▲, Profit ▼)

**Q4 revenue increased, while continuously affected by constrained vehicle build due to component parts shortage. Q4 profit reduced with negative impact of higher energy and material cost, despite cost saving efforts. Cumulative profit also reduced**



**Europe (Cum. Rev ▲, Profit ▼ : Q4 Rev ▼, Profit ▼)**

**Asia (Cum. Rev ▼, Profit ▼ : Q4 Rev ▼, Profit ▼)**

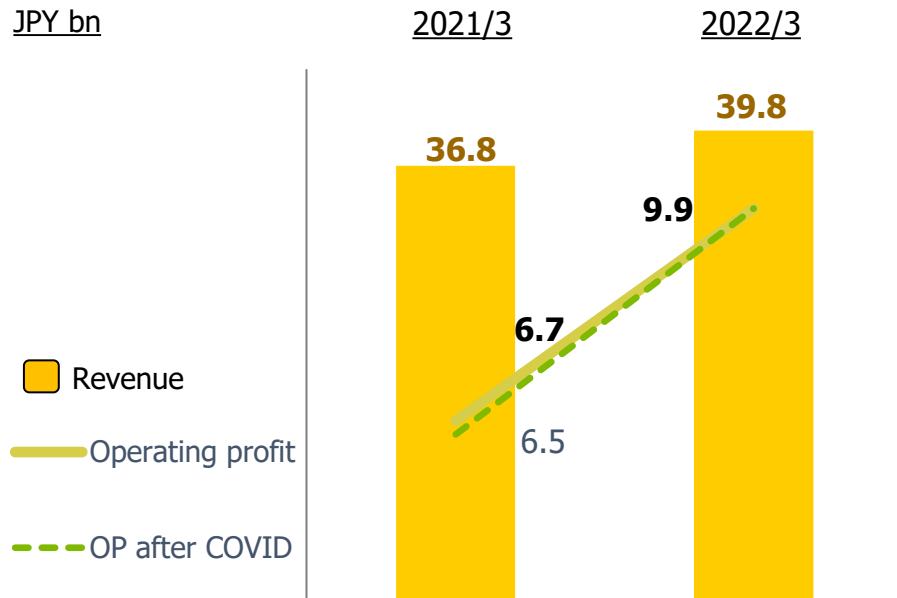
**Americas (Cum. Rev ▲, Profit ▼ : Q4 Rev ▲, Profit ▼)**

- Q4 sales volume reduced in Europe and Asia including Japan, impacted by continuous constrained vehicle build due to shortage of component parts such as semiconductors
- Q4 profit reduced in all regions, impacted by higher energy and material cost, although losses were reduced from Q3 levels with cost saving efforts. Cumulative profit also reduced

(JPY bn)	Cum. (12 months)	Q4 (3 months)			Full-year (12 months)		
		2020/3	2021/3	2022/3	Change	2021/3	2022/3
<b>Revenue</b>	<b>281.0</b>	<b>71.6</b>	<b>73.0</b>	<b>1.4</b>	<b>245.2</b>	<b>276.2</b>	<b>31.1</b>
Europe	119.8	31.5	30.3	(1.2)	103.6	116.7	13.1
Asia	67.1	17.2	16.0	(1.3)	60.6	60.4	(0.2)
Americas	94.1	22.9	26.6	3.8	81.0	99.2	18.2
<b>OP</b>	<b>6.1</b>	<b>2.9</b>	<b>(2.0)</b>	<b>(4.9)</b>	<b>1.8</b>	<b>(7.9)</b>	<b>(9.7)</b>
<b>OP after COVID*</b>	<b>4.7</b>	<b>1.7</b>	<b>(2.0)</b>	<b>(3.7)</b>	<b>(7.8)</b>	<b>(7.9)</b>	<b>(0.1)</b>

# Technical Glass (Cum. Rev ▲, Profit ▲ : Q4 Rev ▲, Profit ▲)

Improved revenue and profit, with continuous generally favorable market conditions, recovering from COVID-19 impact in 2021/3  
(like-for-like basis without battery separators disposed in September)



## Technical Glass

- Further improvement in fine glass based on continued cost reduction efforts and better sales mix
- Continued volume improvement of printer lenses by work from home and school from home demand
- Strong demand for glass cord particularly in replacement market. Signs of recovery in Metashine<sup>®</sup> demand for cosmetic applications

(JPY bn)	Cum. (12 months)	Q4 (3 months)			Full-year (12 months)		
	2020/3	2021/3	2022/3	Change	2021/3	2022/3	Change
Revenue	40.1	10.2	9.0	(1.2)	36.8	39.8	3.0
OP	7.1	2.2	2.1	(0.1)	6.7	9.9	3.2
OP after COVID*	7.0	2.2	2.1	(0.1)	6.5	9.9	3.4

## 2. Forecast for Financial Year ending 31 March 2023

# Assumptions for 2023/3 Forecast

<b>Group</b>	<p><b>Revenue planned to increase but operating profit to decrease and net profit to be flat. Continued progress with a key initiative “Restoration of financial stability” in RP24</b></p> <ul style="list-style-type: none"> <li>• Revenue increase expected with volume improvement reflecting demand recovery and higher sales prices with more price pass-through in all businesses</li> <li>• However, operating profit reduction and flat net profit anticipated in the Group total due to continuous input cost increases particularly energy costs, affected by invasion of Ukraine by Russia and worldwide inflation trend</li> <li>• Input cost increases mitigated by continuous cost saving efforts across the Group</li> </ul>
<b>Architectural</b>	<p><b>Continued favorable demand and supply situation, while impacted by higher energy cost assumed especially in Europe</b></p> <ul style="list-style-type: none"> <li>• Europe : price improvement reflecting tighter demand and supply balance continues, but profitability will reduce, affected by higher natural gas prices</li> <li>• Asia : volume and price improving in Japan and robust results continue</li> <li>• NA : favorable domestic market with economic recovery SA : continued tight demand and supply. Contributed by new float furnace in Argentina</li> <li>• Solar energy glass : volume increase assumed while planned cold repair in Vietnam</li> </ul>
<b>Automotive</b>	<p><b>Affected by component shortage and higher input costs, despite strong vehicle demand</b></p> <ul style="list-style-type: none"> <li>• Anticipating continued strong vehicle demand and car inventory replenishment</li> <li>• Continued component shortages to be resolved gradually</li> <li>• Cold repair progressing in Japan</li> <li>• Aiming for operating profit surplus with cost reduction efforts mitigating higher energy and material cost</li> </ul>
<b>Technical Glass</b>	<p><b>Overall business environment continues to improve</b></p> <ul style="list-style-type: none"> <li>• Continued cost reduction efforts and better sales mix contribute to fine glass</li> <li>• Demand for printer lens to remain robust with working from home demand</li> <li>• Demand mainly in replacement market to increase for glass cord</li> </ul>

# Forecast for Financial Year ending 31 March 2023

**Revenue planned to increase with improving volumes and prices, but operating profit to decrease with higher input costs especially in Europe affected by invasion of Ukraine by Russia. Continuous cost saving, price pass-through and cash management efforts, representing progress with the key initiative “Restoration of financial stability” in RP24**

(JPY bn)	2022/3 Actual		2023/3 Forecast		Change	
	H1	Full-year	H1	Full-year	H1	Full-year
<b>Revenue</b>	<b>290.7</b>	<b>600.6</b>	<b>320.0</b>	<b>650.0</b>	<b>29.3</b>	<b>49.4</b>
<b>Operating profit</b>	<b>12.7</b>	<b>20.0</b>	<b>7.0</b>	<b>18.0</b>	<b>(5.7)</b>	<b>(2.0)</b>
Exceptional items (Other)	4.5	3.6	2.0	2.0	(2.5)	(1.6)
<b>Operating profit after exceptional items</b>	<b>17.2</b>	<b>23.6</b>	<b>9.0</b>	<b>20.0</b>	<b>(8.2)</b>	<b>(3.6)</b>
Finance expenses (net)	(5.8)	(12.5)	(7.0)	(13.0)	(1.2)	(0.5)
Impairment of financial receivables owed by joint ventures and associates	-	(3.4)	-	-	-	3.4
Share of JVs and associates' profits	3.3	7.5	2.0	4.0	(1.3)	(3.5)
Other gains/(losses) on equity method investments	-	(3.4)	-	-	-	3.4
<b>Profit before taxation</b>	<b>14.7</b>	<b>11.9</b>	<b>4.0</b>	<b>11.0</b>	<b>(10.7)</b>	<b>(0.9)</b>
<b>Profit for the period</b>	<b>9.6</b>	<b>6.8</b>	<b>2.0</b>	<b>5.0</b>	<b>(7.6)</b>	<b>(1.8)</b>
<b>Net profit *</b>	<b>8.6</b>	<b>4.1</b>	<b>2.0</b>	<b>4.0</b>	<b>(6.6)</b>	<b>(0.1)</b>

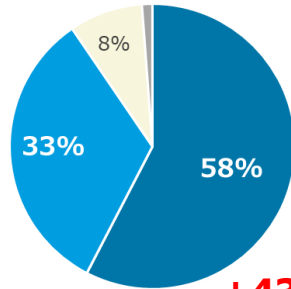
# Energy Cost Breakdown (2022/3 Actual → 2023/3 Forecast) **NSG**

GROUP

**2023/3 forecast anticipating the Group energy cost increase by +43% and natural gas +61% from 2022/3 actual, reflecting continued higher energy cost affected by invasion of Ukraine by Russia. Especially larger impact of natural gas in Europe**

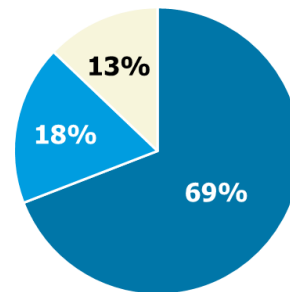
## 2022/3 (Full-year) Actual

**Group (by Energy)**



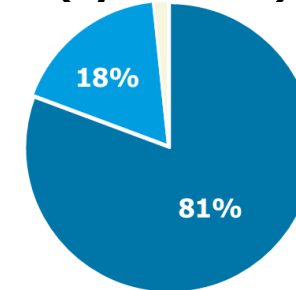
**+43%  
Natural gas +61%**

**Group natural gas (by Region)**

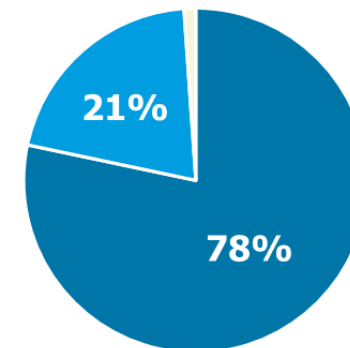
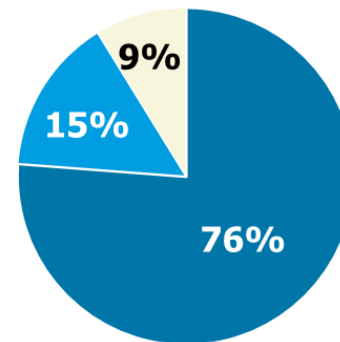
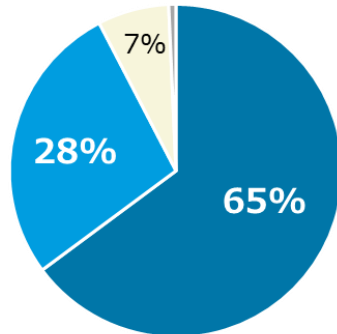


**Europe +78%**

**Group natural gas (by business)**



**Architectural +57%**



■ Natural Gas ■ Electricity  
■ Oil ■ Others

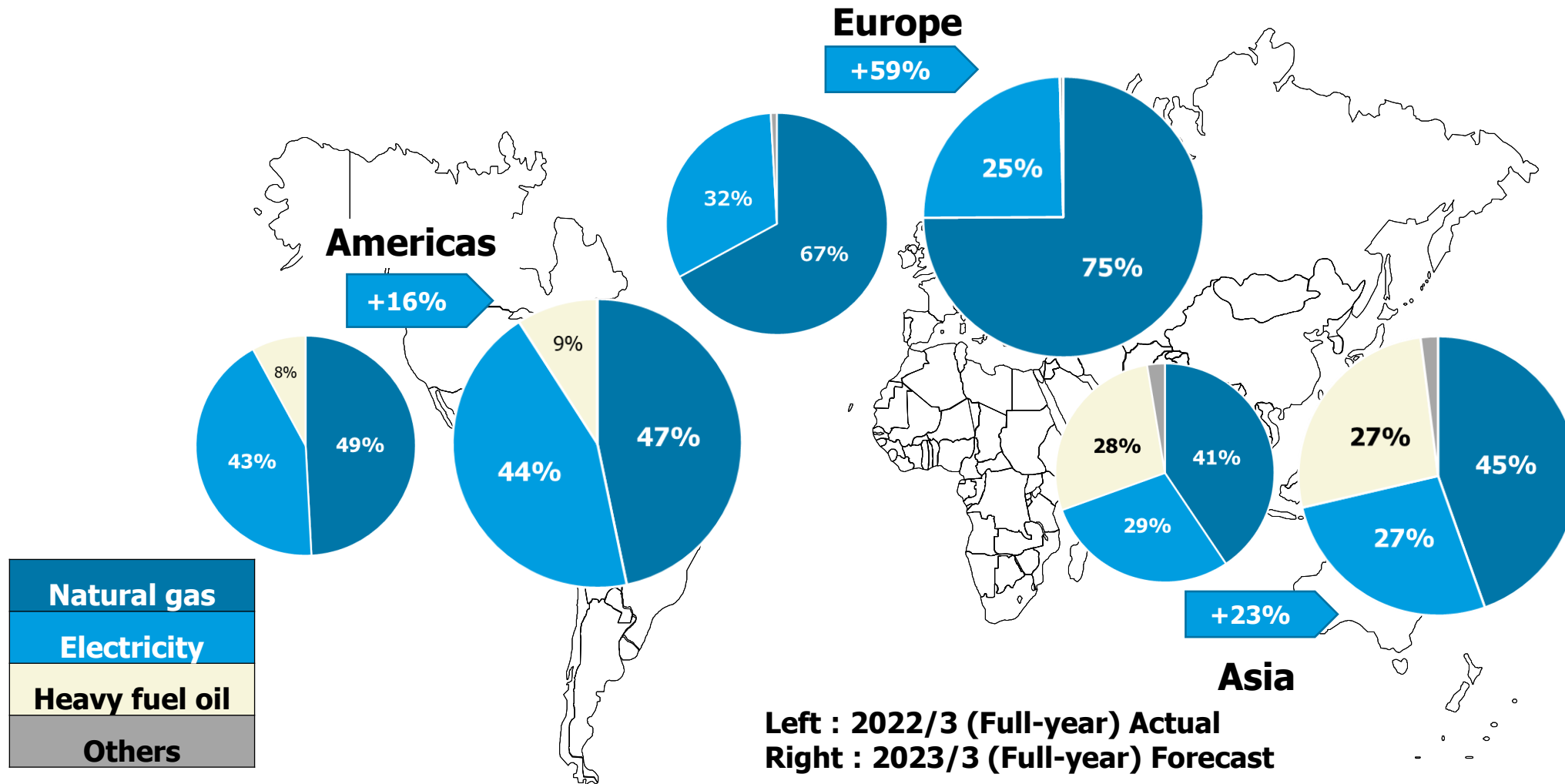
■ Europe ■ Asia ■ Americas

■ Architectural ■ Automotive ■ Technical

## 2023/3 (Full-year) Forecast

# Energy Cost Breakdown (by region)

Continued significant impact by higher natural gas price in Europe



# Measures for Profit Improvement in Automotive Business

## Business Environment






- Vehicle production constraints affected by semiconductor shortage while strong demand
- Higher input cost mainly natural gas in Europe
- Rapid development of CASE will cause significant changes to the auto industry supply chain
  - While demand for windshields with HUD, glass antenna for 5G and solar control coating on glass for EV is expected to grow, the resource allocation will have to be more selective and focused
  - CASE will also increase its importance in the replacement glass business



## Measures for Profit Improvement

- Cost reduction
  - Headcount reduction from the year before last and drastic cost structural reform representing RP24 including consolidation of manufacturing and logistics sites
- Value-adding
  - Expansion of value-added products by leveraging the Group's proprietary technologies, especially advanced windshields
  - Strengthen ADAS\*<sup>1</sup> and sales and distribution network in replacement glass
- Price pass-through in Automotive business

Providing value-added glass for advancing automotive industry, leveraging the Group's technical strengths

-  **Environment: Heated WS**
-  **Safety & Security: ADAS\*<sup>1</sup>**
-  **Connectivity: Next-gen antennas, HUD\*<sup>2</sup>**
-  **Comfort & Convenience: Low e coating**
-  **Style: Complex shaping**

\*1 ADAS: Advanced Driver Assistant System

\*2 HUD: Head Up Display



### 3. Update of Transformation Initiatives under Revival Plan 24 (RP24)

# Transformation Initiatives under Revival Plan 24

**Initiatives underway for business to grow sustainably according to RP24. Achieved in shareholder's equity ratio and free cash flows among the financial targets as a single year**

## Three Reforms

### **Cost structure reform**

- Headcount : Consolidation/Closure of sites/production lines mainly in Automotive business in Europe and Americas. Approximately 1,000 reductions in 2022/3, resulting in 2,340 since 2020/3 end (JPY 13.6 bn reduction vs 2020/3) (Severance cost provided in 2021/3)
- Non headcount : Direct costs savings of JPY 5.0 bn in 2022/3 via Kaikaku and Kakushin activities
- JPY 6.8 bn cost reduction above plan in the additional initiatives in Automotive business

### **Business structure reform**

- New float furnace construction in Argentina progressing for full operation in H1 of 2023/3
- Trial becoming the world's first flat glass manufacturer to fire furnace using 100% biofuel

New float furnace in Argentina



### **Corporate culture reform**

- Progressing "Inclusion & Diversity (I&D)" activities : celebrating International Women's Day across the Group to provide a place where all employees can shine like "glass" in 2022, the International Year of Glass
- Encouragement of open communication : promoting discussion based on the employee opinion survey "Your Voice"

## Two Key Initiatives

### **Restoration of financial stability (2022/3 full-year actual)**

- Turned profit before tax and net profit with significant improvement by JPY 21.1 bn from 2021/3. Shareholder's equity ratio above 15%
- JPY 60.4 bn of cash and JPY 53.2 bn unused commitment lines at the end of March 2022

### **Transformation into more profitable business portfolio**

- Discussing capacity increase for solar energy glass furnace in response to First Solar's capacity increase
- Many inquiries about "MAGNAVI®", glass fiber with high elasticity and high strength
- "Botanical™" development with higher light transmission, aiming for contribution to crop growth

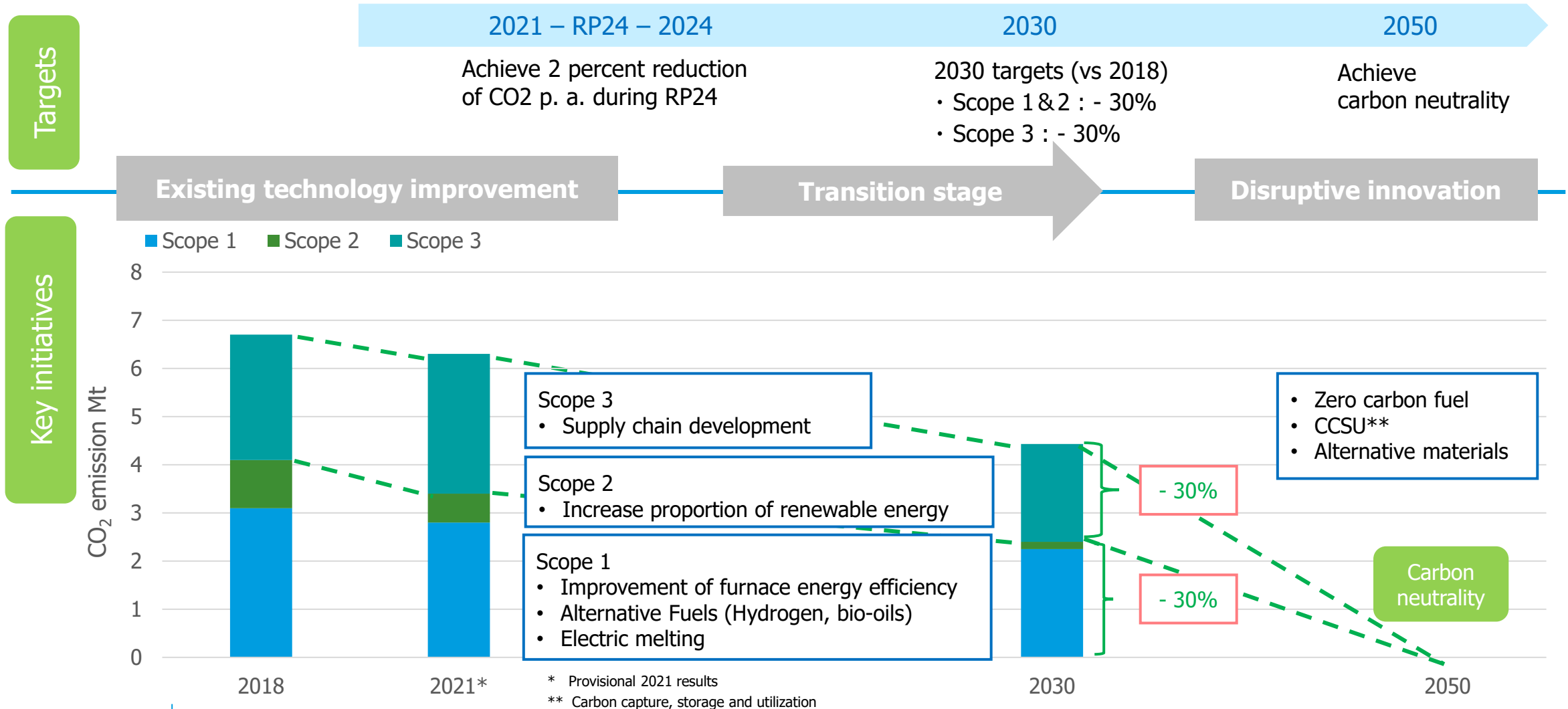


## 4. Progress of Sustainability

# Roadmap to Carbon Neutrality for 2050

**Committing to achieve carbon neutrality by 2050.**

**Raising carbon reduction target by 2030 from 21% to 30% compared to 2018**



## 5. Summary

# Summary

## 1. Financial Year ended 31 March 2022 Annual Results

- Continued profit surplus with strong Architectural and Technical Glass performance. Achieved full-year forecast of revenue and operating profit
- Net profit including impairment losses of debt and equity investments in JVs and associates related to JV in Russia
- Shareholders' equity ratio and cash flows improving further with positive factors including net profit

## 2. Forecast for Financial Year ending 31 March 2023

- Revenue increase with volume improvement reflecting demand recovery and higher sales prices with more price pass-through in all businesses
- However operating profit reduction and flat net profit anticipated in the Group total, due to continuous input cost increases, particularly energy costs, affected by invasion of Ukraine by Russia and worldwide inflation trend.
- Mitigating input cost increases by continuous cost saving efforts across the Group for profit improvement

## 3. Update of Transformation Initiatives under Revival Plan 24

- Cost structure reform: Headcount and cost reduction initiatives progressing
- Business structure reform: New float line construction in Argentina progressing for full operation in H1 of 2023/3
- Restoration of financial stability : Achieved RP24 financial targets of shareholder's equity ratio and free cash flows as a single year

## 4. Progress of Sustainability

- To commit carbon neutrality by 2050
- To raise the carbon reduction target by 2030 from 21% to 30% compared to 2018 levels

# Notice

The projections contained in this document are based on information currently available to us and certain assumptions that we consider to be reasonable. Hence the actual results may differ. The major factors that may affect the results are the economic and competitive environment in major markets, product supply and demand shifts, currency exchange and interest rate fluctuations, changes in supply of raw materials and fuel and changes and laws and regulations, but not limited.

Nippon Sheet Glass Company, Limited

# Appendices

## Financial Year ended 31 March 2022 Annual Results

- Consolidated Income Statement – Quarterly Trend
- Revenue & Operating Profit – Quarterly Trend
- Segmental Information by Quarter
- Exceptional items
- Revenue & Operating Profit – by Region
- Foreign Currency Exchange Rates and Sensitivity
- Depreciation & Amortization, Capital Expenditures, R&D Expenditures
- News Releases — November 2021 to April 2022



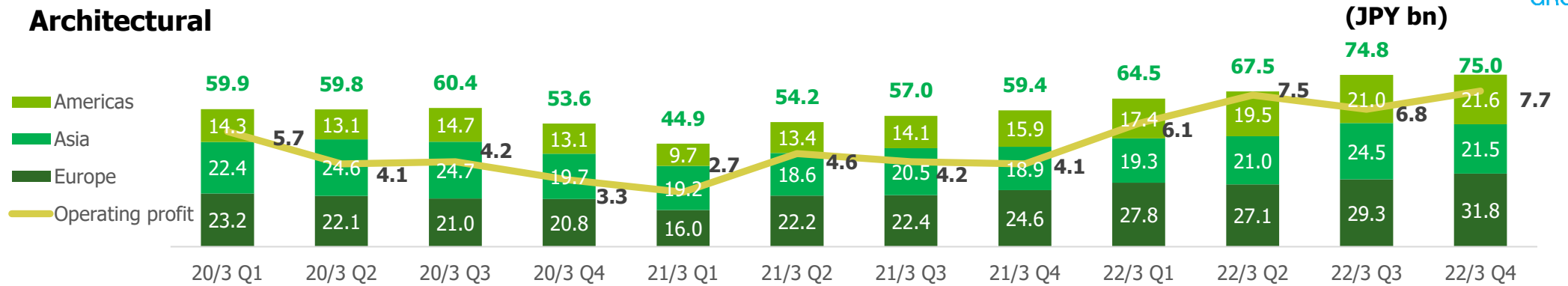
# Consolidated Income Statement – Quarterly Trend

(JPY bn)	2020/3				2021/3				2022/3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Revenue</b>	<b>147.1</b>	<b>141.5</b>	<b>137.2</b>	<b>130.4</b>	<b>91.9</b>	<b>129.7</b>	<b>135.8</b>	<b>141.9</b>	<b>147.7</b>	<b>143.0</b>	<b>152.3</b>	<b>157.6</b>
<b>Operating profit/(loss)</b>	<b>8.8</b>	<b>6.1</b>	<b>3.1</b>	<b>3.2</b>	<b>(0.6)</b>	<b>3.8</b>	<b>4.8</b>	<b>5.1</b>	<b>7.2</b>	<b>5.5</b>	<b>1.8</b>	<b>5.5</b>
<b>Operating profit margin (%)</b>	<b>6.0%</b>	<b>4.3%</b>	<b>2.3%</b>	<b>2.5%</b>	<b>–</b>	<b>2.9%</b>	<b>3.5%</b>	<b>3.6%</b>	<b>4.9%</b>	<b>3.9%</b>	<b>1.2%</b>	<b>3.5%</b>
Exceptional items (COVID-19 related)	-	-	-	(2.2)	(11.5)	(1.3)	(1.2)	(2.1)	-	-	-	-
<b>Operating profit/(loss) after COVID-19 related exceptional items</b>	<b>8.8</b>	<b>6.1</b>	<b>3.1</b>	<b>1.0</b>	<b>(12.1)</b>	<b>2.5</b>	<b>3.6</b>	<b>3.0</b>	<b>7.2</b>	<b>5.5</b>	<b>1.8</b>	<b>5.5</b>
Exceptional items (Other)	(0.6)	(1.6)	(2.2)	(17.4)	(0.1)	(0.8)	1.0	(6.1)	(0.2)	4.7	(0.2)	(0.7)
<b>Operating profit/(loss) after exceptional items</b>	<b>8.2</b>	<b>4.5</b>	<b>0.9</b>	<b>(16.4)</b>	<b>(12.2)</b>	<b>1.7</b>	<b>4.6</b>	<b>(3.1)</b>	<b>7.0</b>	<b>10.2</b>	<b>1.7</b>	<b>4.8</b>
Finance expenses (net)	(3.5)	(2.8)	(3.2)	(2.3)	(2.4)	(3.0)	(2.1)	(3.5)	(2.9)	(2.9)	(3.2)	(3.4)
Impairment of financial receivables owed by joint ventures and associates	-	-	-	-	-	-	-	-	-	-	-	(3.4)
Share of JVs and associates' profits	0.5	0.3	0.4	(0.1)	(0.4)	0.2	1.0	1.3	1.5	1.9	2.2	1.9
Other gains/(losses) on equity method investments	-	-	-	-	-	-	-	0.6	-	-	-	(3.4)
<b>Profit/(loss) before taxation</b>	<b>5.2</b>	<b>2.0</b>	<b>(1.9)</b>	<b>(18.8)</b>	<b>(14.9)</b>	<b>(1.1)</b>	<b>3.5</b>	<b>(4.7)</b>	<b>5.5</b>	<b>9.2</b>	<b>0.7</b>	<b>(3.6)</b>
<b>Profit/(loss) for the period</b>	<b>3.1</b>	<b>(0.7)</b>	<b>(0.5)</b>	<b>(19.4)</b>	<b>(16.5)</b>	<b>(0.7)</b>	<b>3.7</b>	<b>(2.8)</b>	<b>2.9</b>	<b>6.7</b>	<b>1.0</b>	<b>(3.8)</b>
<b>Net profit/(loss) *</b>	<b>2.9</b>	<b>(1.0)</b>	<b>(0.7)</b>	<b>(20.1)</b>	<b>(16.4)</b>	<b>(0.9)</b>	<b>3.4</b>	<b>(3.0)</b>	<b>2.5</b>	<b>6.1</b>	<b>0.0</b>	<b>(4.5)</b>
<b>EBITDA</b>	<b>17.5</b>	<b>14.2</b>	<b>11.5</b>	<b>11.8</b>	<b>6.1</b>	<b>12.7</b>	<b>13.5</b>	<b>14.5</b>	<b>16.5</b>	<b>14.6</b>	<b>11.1</b>	<b>14.4</b>

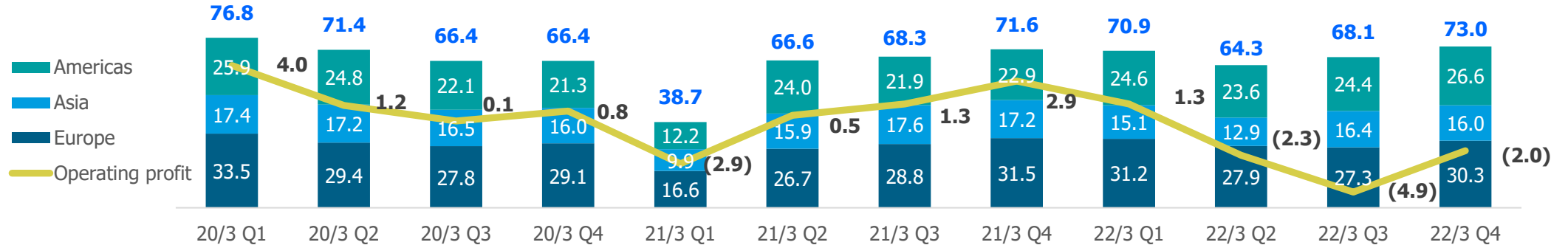
\*Profit (loss) attributable to owners of the parent

# Revenue & Operating Profit – Quarterly Trend

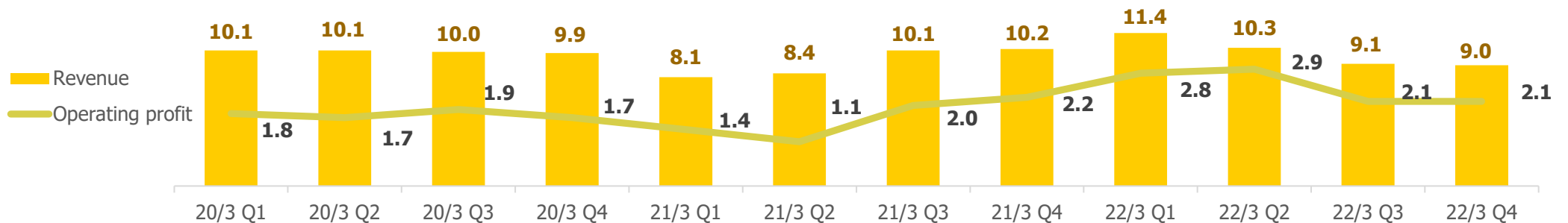
## Architectural



## Automotive



## Technical Glass



# Segmental Information by Quarter

(JPY bn)	2020/3					2021/3					2022/3				
	Q1	Q2	Q3	Q4	Cum.	Q1	Q2	Q3	Q4	Cum.	Q1	Q2	Q3	Q4	Cum.
<b>Revenue: Architectural</b>	<b>59.9</b>	<b>59.8</b>	<b>60.4</b>	<b>53.6</b>	<b>233.7</b>	<b>44.9</b>	<b>54.2</b>	<b>57.0</b>	<b>59.4</b>	<b>215.5</b>	<b>64.5</b>	<b>67.5</b>	<b>74.8</b>	<b>75.0</b>	<b>281.8</b>
Europe	23.2	22.1	21.0	20.8	87.1	16.0	22.2	22.4	24.6	85.2	27.8	27.1	29.3	31.8	116.0
Asia	22.4	24.6	24.7	19.7	91.4	19.2	18.6	20.5	18.9	77.2	19.3	21.0	24.5	21.5	86.2
Americas	14.3	13.1	14.7	13.1	55.2	9.7	13.4	14.1	15.9	53.1	17.4	19.4	21.0	21.6	79.5
<b>Operating profit</b>	<b>5.7</b>	<b>4.1</b>	<b>4.2</b>	<b>3.3</b>	<b>17.3</b>	<b>2.7</b>	<b>4.6</b>	<b>4.2</b>	<b>4.1</b>	<b>15.7</b>	<b>6.1</b>	<b>7.5</b>	<b>6.8</b>	<b>7.7</b>	<b>28.1</b>
<b>OP after COVID*</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.7</b>	<b>16.7</b>	<b>(2.2)</b>	<b>4.1</b>	<b>3.8</b>	<b>3.4</b>	<b>9.1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Revenue: Automotive</b>	<b>76.8</b>	<b>71.4</b>	<b>66.4</b>	<b>66.4</b>	<b>281.0</b>	<b>38.7</b>	<b>66.6</b>	<b>68.3</b>	<b>71.6</b>	<b>245.2</b>	<b>70.9</b>	<b>64.3</b>	<b>68.1</b>	<b>73.0</b>	<b>276.2</b>
Europe	33.5	29.4	27.8	29.1	119.8	16.6	26.7	28.8	31.5	103.6	31.2	27.9	27.3	30.3	116.7
Asia	17.4	17.2	16.5	16.0	67.1	9.9	15.9	17.6	17.2	60.6	15.1	12.9	16.4	16.0	60.4
Americas	25.9	24.8	22.1	21.3	94.1	12.2	24.0	21.9	22.9	81.0	24.6	23.6	24.4	26.6	99.2
<b>Operating profit</b>	<b>4.0</b>	<b>1.2</b>	<b>0.1</b>	<b>0.8</b>	<b>6.1</b>	<b>(2.9)</b>	<b>0.5</b>	<b>1.3</b>	<b>2.9</b>	<b>1.8</b>	<b>1.3</b>	<b>(2.3)</b>	<b>(4.9)</b>	<b>(2.0)</b>	<b>(7.9)</b>
<b>OP after COVID*</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(0.6)</b>	<b>4.7</b>	<b>(9.3)</b>	<b>(0.6)</b>	<b>0.4</b>	<b>1.7</b>	<b>(7.8)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Revenue: Technical</b>	<b>10.1</b>	<b>10.1</b>	<b>10.0</b>	<b>9.9</b>	<b>40.1</b>	<b>8.1</b>	<b>8.4</b>	<b>10.1</b>	<b>10.2</b>	<b>36.8</b>	<b>11.4</b>	<b>10.3</b>	<b>9.1</b>	<b>9.0</b>	<b>39.8</b>
Europe	1.7	1.8	1.6	2.0	7.1	1.3	1.4	1.9	1.8	6.4	2.1	1.8	2.0	2.0	7.9
Asia	8.0	7.9	8.1	7.7	31.7	6.5	6.8	7.9	8.1	29.3	9.0	8.2	6.8	6.6	30.6
Americas	0.4	0.4	0.3	0.2	1.3	0.3	0.2	0.3	0.3	1.1	0.3	0.3	0.3	0.4	1.3
<b>Operating profit</b>	<b>1.8</b>	<b>1.7</b>	<b>1.9</b>	<b>1.7</b>	<b>7.1</b>	<b>1.4</b>	<b>1.1</b>	<b>2.0</b>	<b>2.2</b>	<b>6.7</b>	<b>2.8</b>	<b>2.9</b>	<b>2.1</b>	<b>2.1</b>	<b>9.9</b>
<b>OP after COVID*</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.6</b>	<b>7.0</b>	<b>1.2</b>	<b>1.0</b>	<b>2.1</b>	<b>2.2</b>	<b>6.5</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Revenue: Other</b>	<b>0.3</b>	<b>0.2</b>	<b>0.4</b>	<b>0.5</b>	<b>1.4</b>	<b>0.2</b>	<b>0.4</b>	<b>0.5</b>	<b>0.6</b>	<b>1.7</b>	<b>0.9</b>	<b>0.8</b>	<b>0.3</b>	<b>0.7</b>	<b>2.7</b>
<b>Operating profit</b>	<b>(2.7)</b>	<b>(0.9)</b>	<b>(3.1)</b>	<b>(2.6)</b>	<b>(9.3)</b>	<b>(1.8)</b>	<b>(2.4)</b>	<b>(2.7)</b>	<b>(4.2)</b>	<b>(11.1)</b>	<b>(3.1)</b>	<b>(2.5)</b>	<b>(2.2)</b>	<b>(2.4)</b>	<b>(10.1)</b>
<b>OP after COVID*</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(2.7)</b>	<b>(9.4)</b>	<b>(1.8)</b>	<b>(2.0)</b>	<b>(2.7)</b>	<b>(4.3)</b>	<b>(10.8)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Revenue: Total</b>	<b>147.1</b>	<b>141.5</b>	<b>137.2</b>	<b>130.4</b>	<b>556.2</b>	<b>91.9</b>	<b>129.7</b>	<b>135.8</b>	<b>141.9</b>	<b>499.2</b>	<b>147.7</b>	<b>143.0</b>	<b>152.3</b>	<b>157.6</b>	<b>600.6</b>
<b>Operating profit</b>	<b>8.8</b>	<b>6.1</b>	<b>3.1</b>	<b>3.2</b>	<b>21.2</b>	<b>(0.6)</b>	<b>3.8</b>	<b>4.8</b>	<b>5.1</b>	<b>13.1</b>	<b>7.2</b>	<b>5.5</b>	<b>1.8</b>	<b>5.5</b>	<b>20.0</b>
<b>OP after COVID*</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.0</b>	<b>19.0</b>	<b>(12.1)</b>	<b>2.5</b>	<b>3.6</b>	<b>3.0</b>	<b>(3.0)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

# Exceptional Items

(JPY bn)	2021/3	2022/3	
	Full-year	Q4 (3 months)	Full-year
<b>COVID-19 related items *</b>	(16.1)	-	-
Government support	2.6	-	-
Suspension and other costs	(18.7)	-	-
<b>Restructuring costs</b>	(14.7)	(0.6)	(0.7)
<b>Net impairment of non-current assets</b>	(1.3)	0.1	0.1
<b>Disposal of non-current assets</b>	7.1	-	-
<b>Gain on disposal of business</b>	-	-	4.4
<b>Settlement of litigation matters</b>	3.4	-	-
<b>Gain on disposal of subsidiaries and joint ventures</b>	0.7	-	-
<b>COVID-19 related items government support</b>	-	-	0.4
<b>Others</b>	(0.5)	(0.3)	(0.6)
<b>Exceptional items – net</b>	(21.4)	(0.7)	3.6

\* In 2021/3 the Group recorded the direct costs and also unrecovered operating costs arising from the COVID-19 pandemic as exceptional items, together with any related income from governments. Such costs include payments to employees not engaged in productive activities due to the COVID-19 pandemic, costs of maintaining idle facilities, and direct costs such as the deep cleaning of facilities to promote a safe operating environment.

# Revenue & Operating Profit – by Region

(JPY bn)	2021/3 Full-year			2022/3 Full-year			Change	
	Revenue	%	Operating profit/(loss)	Revenue	%	Operating profit	Revenue	Operating profit/(loss)
<b>Europe</b>	<b>195.2</b>	<b>39%</b>	<b>5.3</b>	<b>240.6</b>	<b>40%</b>	<b>(0.8)</b>	<b>45.4</b>	<b>(6.0)</b>
<b>Asia</b>	<b>167.1</b>	<b>33%</b>	<b>12.8</b>	<b>177.2</b>	<b>30%</b>	<b>20.4</b>	<b>10.0</b>	<b>7.7</b>
<b>Americas</b>	<b>135.2</b>	<b>27%</b>	<b>6.1</b>	<b>180.0</b>	<b>30%</b>	<b>10.5</b>	<b>44.8</b>	<b>4.3</b>
Other *	1.7	0%	(11.1)	2.7	0%	(10.1)	1.0	1.0
<b>Total</b>	<b>499.2</b>	<b>100%</b>	<b>13.1</b>	<b>600.6</b>	<b>100%</b>	<b>20.0</b>	<b>101.3</b>	<b>6.9</b>

\* Revenue and Operating loss of Other Operation are not split by geographical regions.

# Foreign Currency Exchange Rates and Sensitivity

## Average rates used

	2020/3				2021/3				2022/3				2023/3
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Forecast
<b>GBP</b>	141	137	138	138	133	135	136	139	153	152	153	153	157
<b>EUR</b>	124	121	121	121	118	121	123	124	132	131	131	130	133
<b>USD</b>	109	109	109	109	107	106	106	106	109	109	112	112	114
<b>BRR</b>	28.0	27.6	27.2	26.4	19.9	19.8	19.7	19.7	20.6	20.8	20.7	21.0	20.0
<b>ARS</b>	4.70	Closing rates are applied – hyperinflation											

## Closing rates used

	2020/3				2021/3				2022/3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>GBP</b>	137	133	144	133	132	135	141	152	153	150	156	160
<b>EUR</b>	123	118	122	119	121	124	127	130	132	129	131	136
<b>USD</b>	108	108	109	108	107	105	103	111	111	112	116	122
<b>BRR</b>	28.3	26.0	27.1	20.8	19.9	18.7	19.8	19.1	22.3	20.6	20.4	25.5
<b>ARS</b>	2.53	1.88	1.82	1.68	1.53	1.38	1.22	1.20	1.16	1.13	1.12	1.10

## Sensitivity

Increase (decrease) if the value of the yen depreciates by 1% - all other things being equal

	2022/3
Equity	JPY 4.0 billion
Profit for the period	Improve by JPY 0.1 billion

# Depreciation & Amortization, Capital Expenditures, R&D Expenditures

(JPY bn)	2021/3	2022/3	2023/3 Full-year Forecast
<b>Depreciation &amp; Amortization</b>	<b>35.8</b>	<b>36.7</b>	<b>39.0</b>
<b>Capital expenditures</b>	<b>43.3</b>	<b>28.6</b>	<b>40.0</b>
Ordinary	19.0	4.0	
Strategic projects and other	24.3	24.6	
<b>R&amp;D expenditures</b>	<b>8.3</b>	<b>7.7</b>	<b>9.5</b>
Architectural	2.3	2.4	
Automotive	2.3	2.3	
Technical Glass	0.9	0.9	
Other	2.8	2.2	

# News Releases — November 2021 to April 2022



<https://www.nsg.com/en/media>

11-Nov-21	Support for TCFD Recommendations
25-Nov-21	NSG Received High Scores in the Commitment Line Syndication based on ESG/SDGs Evaluation by SMBC
14-Jan-22	NSG Group Introduces Renewable Electricity in Poland
2-Feb-22	"MAGNAVI™", High-Performance Fiber with High Modulus and Specific Strength
28-Feb-22	NSG Group Recognized As CDP Supplier Engagement Leader 2021
8-Mar-22	Message for Celebrating IWD from Reiko Kusunose, Chair of the Inclusion & Diversity (I&D) Steering Committee, NSG Group
14-Apr-22	Biofuel Trial by St Helens Glass Giant Marks New World-First Towards Decarbonisation
21-Apr-22	Statement on NSG Group's Suspended Trading in Russia



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