



NSG Group 2023/3 Quarter 2 Results (from 1 April 2022 to 30 September 2022)

Nippon Sheet Glass Company, Limited 10 November 2022



Shigeki Mori

Chief Executive Officer

Munehiro Hosonuma

Chief Operating Officer

Reiko Kusunose

Chief Financial Officer

Agenda



- 1. Financial Year ending 31 March 2023 Quarter 2 Results
- 2. Forecast for Financial Year ending 31 March 2023
- 3. Update of Transformation Initiatives under Revival Plan 24 (RP24)
- 4. Summary



1. Financial Year ending 31 March 2023 Quarter 2 Results

Consolidated Income Statement



Increased revenue and operating profit YoY, ahead of H1 forecast.

Price improvement and weaker JPY mitigating higher input costs.

Not loss due to impairment of goodwill and intangible assets in Aut

Net loss due to impairment of goodwill and intangible assets in Automotive business Europe

(1DV h)	Q2	(3 mont	hs)	Cumula	ative (6 m	nonths)	H1
(JPY bn)	2022/3	2023/3	Change	2022/3	2023/3	Change	Forecast
Revenue	143.0	197.7	54.7	290.7	375.7	85.0	360.0
Operating profit	5.5	6.2	0.6	12.7	14.4	1.7	11.0
ROS: Return on sales	3.9%	3.1%	(0.8) pt	4.4%	3.8%	(0.6) pt	3.1%
Exceptional items (net)	4.7	(47.3)	(52.0)	4.5	(44.9)	(49.5)	2.0
Operating profit/(loss) after exceptional items	10.2	(41.1)	(51.3)	17.2	(30.5)	(47.7)	13.0
Finance expenses (net)	(2.9)	(3.7)	(0.8)	(5.8)	(6.6)	(0.7)	(6.0)
Share of JVs and associates' profits	1.9	1.0	(0.9)	3.3	3.2	(0.1)	
Other gains/(losses) on equity method investments	-	0.5	0.5	-	(0.7)	(0.7)	2.0
Profit/(loss) before taxation	9.2	(43.4)	(52.6)	14.7	(34.5)	(49.3)	9.0
Profit/(loss) for the period	6.7	(40.3)	(47.0)	9.6	(37.0)	(46.6)	4.0
Net profit/(loss) *	6.1	(41.2)	(47.3)	8.6	(38.8)	(47.4)	3.0
EBITDA	14.6	16.1	1.5	31.1	34.2	3.0	

Sales increased in all businesses partly with weaker JPY. (Without battery separator business disposed in 2021) Achieved H1 forecast with strong performance of Architectural and Technical covering Automotive

[Sales and Operating Profit: vs PY]

(JPY bn)	Sales	Operating profit		
Architectural	+50.1	+1.9		
Automotive	+36.7	(0.6)		
Technical	(1.5)	(0.0)		
Others	(0.3)	+0.5		
Group total	+85.0	+1.7		
(Sales and Opera	d Operating Profit: vs H1 forecast			
(JPY bn, %)	Sales	Operating profit		

 (JPY bn, %)
 Sales
 Operating profit

 Group total
 +15.7 (+4%)
 +3.4 (+31%)

Impairment of goodwill and intangible assets related to Automotive business in Europe

^{*} Profit/(loss) attributable to owners of the parent

Exceptional Items



Impairment of goodwill and intangible assets in Automotive business Europe. Reducing financial risk since the acquisition of Pilkington, toward the "restoration of financial stability", key initiative of RP24

(1DV by)	2022/3	2023/3
(JPY bn)	Q2 Cum.	Q2 Cum.
Restructuring costs	(0.1)	(0.1)
Impairment of goodwill & intangible assets	-	(48.8)
Settlement of litigation matters - net	(0.2)	2.7
Gain on disposal of subsidiaries and businesses	4.4	1.1
Others	0.4	0.1
Exceptional items - net	4.5	(44.9)

Full impairment of all remaining goodwill (JPY 36.4 bn) and intangible assets (JPY 12.4 bn) related to Automotive business in Europe, originally arising on the acquisition of Pilkington in 2006

Received settlement money following tornado damage in the USA in 2017

Gain on disposal of Automotive glass business in China (Gain on disposal of battery separator business in the previous year)

Impairment of Goodwill and Intangible Assets Related to Automotive Business in Europe Arising on the Acquisition of Pilkington (Reference)



Impairment of goodwill and intangible assets mainly as a consequence of increased discount rate used in impairment test following interest rate rises in Europe.

Profit recovery in European Automotive business still expected over the medium term

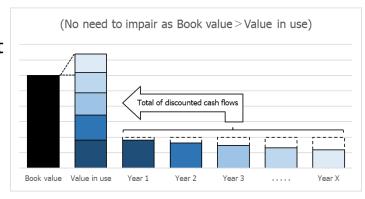
Impairment test of goodwill and intangible assets

- Based on comparison of value in use of Cash Generating Unit (CGU, business and region) with accounting book value of assets in CGU
- Value in use calculated based on future operating cash flows in each CGU discounted by appropriate discount rate

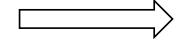
Impairment of goodwill and intangible assets related to Automotive business during Q2

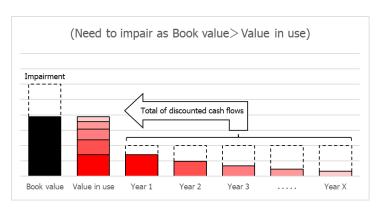
- Caused mainly by discount rate increase of approx. 2% (6.92%⇒8.8%) due to interest rate rises in Europe
- Profit recovery in European Automotive business still expected over the medium term
- One-off loss from assets devaluation without any cash outflow
- Relatively small overall impact on shareholder's equity as offset by other movements including FX caused by weaker JPY
- Representing full impairment of remaining goodwill and intangible assets arising on acquisition of Pilkington related to European automotive business to reduce financial risk

Example of impairment test



No change in future operating cash flow, but impairment caused by discount rate increase

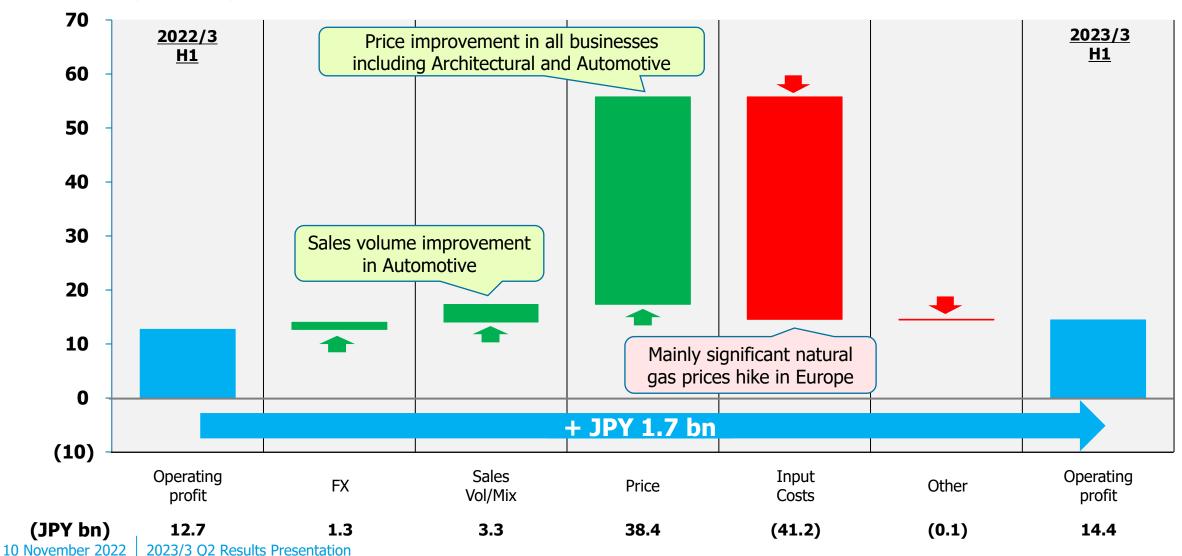




Change Analysis – Operating profit (Cumulative)



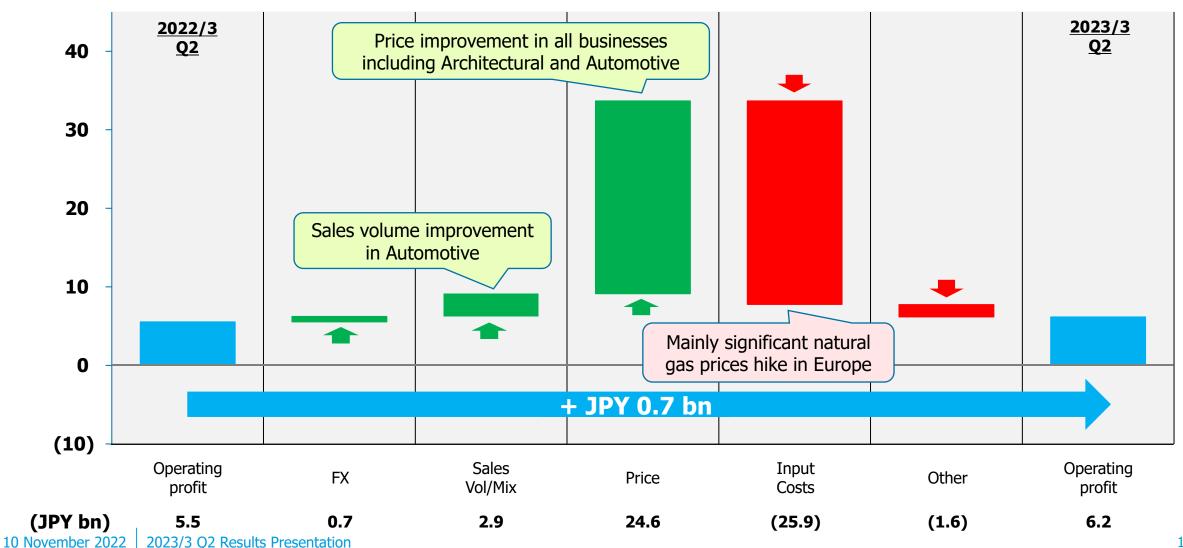
Sales price and volume increases mitigating the impact of energy, material and other costs



Change Analysis – Operating profit (Quarter 2 only)



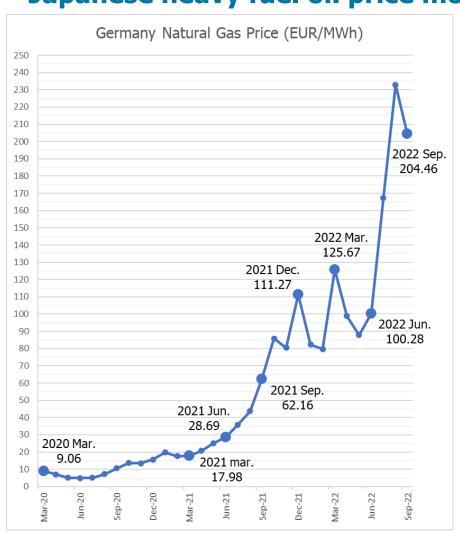
Continuation from Q1, sales price and volume increases mitigating the impact of energy, material and other costs

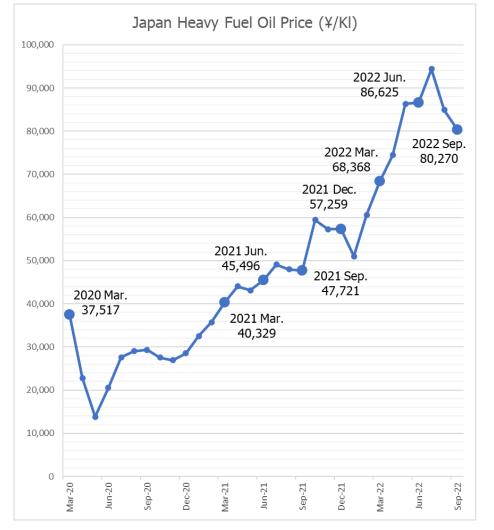


Energy Price Movement



German natural gas price hiked in Q2, above EUR200/MWh at Sep. end 2022. Japanese heavy fuel oil price moved in high price above JPY80,000/Kl during Q2





Glass Market Price Movement



Sep. 2022 German glass price increased 1.7x from Sep. 2021. Offsetting impact of higher input costs especially natural gas



Consolidated Balance Sheet



Shareholders' equity ratio maintained above 15% after impairment of goodwill and intangible assets, with weaker JPY, positive revaluation of energy hedge derivatives, reduction in retirement benefit obligations and hyper inflation adjustment

(JPY bn)	31 March 2022	30 September 2022	Change
Total Assets	939.3	1,007.4	68.2
Non-current assets	637.0	660.4	23.4
Current assets	302.2	347.0	44.8
Total Liabilities	769.9	824.5	54.5
Current liabilities	306.7	379.0	72.3
Non-current liabilities	463.2	445.4	(17.8)
Total Equity	169.4	183.0	13.6
Shareholders' equity	145.3	151.9	6.6
Shareholders' Equity Ratio	15.5%	15.1%	(0.4)pt
Net Debt	365.2	375.0	9.8

Decrease in goodwill and intangible assets with impairment, increase with weaker JPY and positive revaluation of hedge derivatives

Mainly increase in inventory, and trade and other receivables

Mainly increase in loans, and trade and other payables

Impairment offset by weaker JPY and positive revaluation of energy hedge derivatives, reduction in retirement benefit obligations and hyper inflation adjustment. Shareholders' equity ratio maintained above 15%

Increase mainly by free cash outflow and weaker JPY

Consolidated Statement of Cash Flows



Free cash outflow due to working capital movement, recovering during Q2. Aiming to achieve free cash inflow and RP24 target for the full-year, consistent with the previous year

(JPY bn)	Q2	2 (3 month	is)	Cumul	ative (6 m	onths)	
(JPY DII)	2022/3	2023/3	Change	2022/3	2023/3	Change	
Net cash flows from operating activities	15.2	14.6	(0.6)	14.5	11.4	(3.1)	Improvement in Q2, though
included above: Net change in working capital	3.3	4.7	1.4	(8.7)	(15.4)	(6.7)	working capital increase in H1
Net cash flows from investing activities	(7.0)	(11.3)	(4.2)	(15.9)	(20.9)	(5.1)	Gain on disposal of battery separator business in 2022/3
included above: Purchase of property, plant and equipment	(12.0)	(10.0)	2.0	(20.3)	(19.1)	1.2	Separator business in 2022/5
Free cash flow	8.2	3.4	(4.8)	(1.4)	(9.5)	(8.1)	Almost same level with 2022/3
Net cash flows from financing activities	(8.7)	(0.5)	8.2	(11.9)	1.5	13.4	FCF on the recovery track.
Increase/(decrease) in cash and cash equivalents	(0.5)	2.8	3.3	(13.2)	(8.0)	5.2	Aiming to achieve free cash inflow for the full-year
Cash and cash equivalents at the end of the period				40.7	55.2	14.5	,

Segmental Information



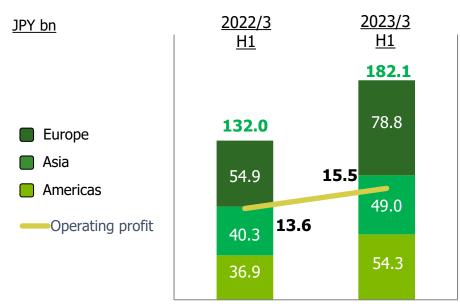
		2021/3	Q2 Cum.		20	022/3 Q2 Cu	m.	2023/3 Q2 Cum.			
(JPY bn)	Revenue	%	Operating profit	Operating profit after COVID*	Revenue	%	Operating profit	Revenue	%	Operating profit	
Architectural	99.0	45%	7.3	1.9	132.0	45%	13.6	182.1	48%	15.5	
Europe	38.2	17%			54.9	19%		78.8	21%		
Asia	37.8	17%			40.3	14%		49.0	13%		
Americas	23.0	10%				36.9	13%		54.3	14%	
Automotive	105.3	48%	(2.4)	(9.9)	135.2	47%	(1.1)	171.9	46%	(1.7)	
Europe	43.3	20%			59.1	20%		69.9	19%		
Asia	25.8	12%			28.0	10%		32.4	9%		
Americas	36.2	16%			48.2	17%		69.6	19%		
Technical Glass	16.5	7%	2.5	2.2	21.7	7%	5.7	20.2	5%	5.7	
Europe	2.7	1%			3.9	1%		4.6	1%		
Asia	13.3	6%			17.2	6%		14.8	4%		
Americas	0.5	0%			0.6	0%		0.8	0%		
Other	0.6	0%	(4.1)	(3.8)	1.8	1%	(5.6)	1.5	0%	(5.1)	
Total	221.4	100%	3.2	(9.6)	290.7	100%	12.7	375.7	100%	14.4	

*Operating profit after COVID-19 related exceptional items

Architectural (Cum. Rev ▲, Profit ▲: Q2 Rev ▲, Profit ▼)



Significant revenue improvement with continued favourable demand in all regions and foreign exchange movement. Cumulative operating profit also improved with price increase mitigating input cost rises particularly energy



(JPY bn)		(Q2 3 months)	Cumulative (6 months)			
(311		2022/3	2022/3 2023/3 Chan			2023/3	Change	
Reve	nue	67.5	96.5	29.0	132.0	182.1	50.1	
	Europe	27.1	40.6	13.5	54.9	78.8	24.0	
	Asia	21.0	26.1	5.1	40.3	49.0	8.7	
	Americas	19.4	29.8	10.4	36.9	54.3	17.4	
OP		7.5	6.6	(0.9)	13.6	15.5	1.9	

Europe (Cum. Rev ▲, Profit ▼ : Q2 Rev ▲, Profit ▼)

- Sign of slight demand decrease
- Worse profitability due to the time lag between spike in input and logistics costs, particularly natural gas and price passthrough

Asia (Cum. Rev ▲, Profit ▲: Q2 Rev ▲, Profit ▲)

- Favourable demand continuing including Japan, with good progress in price improvement
- Robust demand for solar energy glass

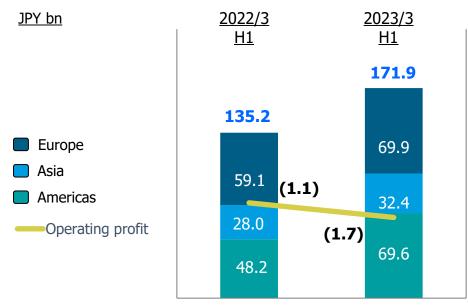
Americas (Cum. Rev ▲, Profit ▲: Q2 Rev ▲, Profit ▲)

- Increased sales price reflecting strong demand, although shipments constrained in North America
- Continued strong demand of solar energy glass
- Strong demand continuing in South America

Automotive (Cum. Rev▲, Profit▼: Q2 Rev▲, Profit▲)



Gradual resolving of constrained vehicle build due to parts shortage in Europe while continuously affecting. Successful agreement in price improvement negotiation with car manufactures partly realized, whilst continuous impacts of higher input costs



(JPY bn)		(Q2 3 months)	Cumulative (6 months)			
		2022/3	2023/3	Change	2022/3	2023/3	Change	
Rev	enue	64.3	90.3	26.0	135.2	171.9	36.7	
	Europe	27.9	36.2	8.3	59.1	69.9	10.8	
	Asia	12.9	17.9	5.0	28.0	32.4	4.4	
	Americas	23.6	36.2	12.7	48.2	69.6	21.4	
OP		(2.3)	(1.0)	1.3	(1.1)	(1.7)	(0.6)	

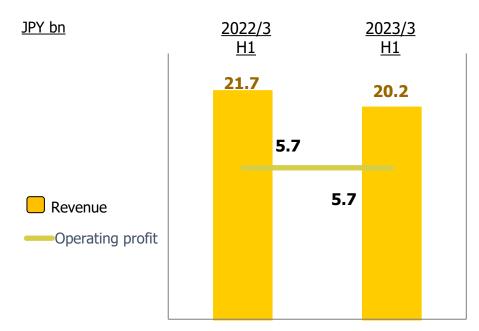
Europe (Cum. Rev ▲, Profit ▼: Q2 Rev ▲, Profit ▲)
 Asia (Cum. Rev ▲, Profit ▼: Q2 Rev ▲, Profit ▲)
 Americas (Cum. Rev ▲, Profit ▼: Q2 Rev ▲, Profit ▼)

- Seeing gradual recovery in Europe while continuous constrained vehicle build due to shortage of component parts
- Cold repair in Maizuru completed
- Favourable demand in North America
- Successful agreement in sales price improvement negotiations with several vehicle manufacturers, partly realized in Q2
- Input cost rises were not fully mitigated by continuous cost reduction efforts and expansion of value-added products

Technical Glass (Cum. Rev ▲, Profit ▲: Q2 Rev ▲, Profit ▲)

Improved revenue and profit, with continuous stable demand, cost reduction efforts and weaker JPY

(like-for-like basis without battery separator business disposed in September 2021)



(JPY bn)		Q2 (3 months))	Cumulative (6 months)			
(31 1 511)	2022/3	2023/3	Change	2022/3	(6 months) 2023/3	Change	
Revenue	10.3	10.2	(0.1)	21.7	20.2	(1.5)	
OP	2.9	2.5	(0.4)	5.7	5.7	(0.0)	

- Further improvement in fine glass based on continued cost reduction efforts and better sales mix
- Demand for printer lenses supported by solid demand while affected by semiconductor shortage
- Stable demand for glass cord particularly in replacement market
- Demand for Metashine[®] slightly recovered for automotive and cosmetic applications



2. Forecast for Financial Year ending 31 March 2023

Assumptions for 2023/3 Forecast



Group	 Full-year sales forecast revised upward reflecting H1 actuals, but operating profit forecast remained considering uncertain business environment Depreciation of JPY continuing Assume continuous input cost increases, with higher energy costs and worldwide inflation trend Uncertain business environment in H2 still anticipated with potential recessionary conditions caused by rising interest rates Focusing on profitability improvement through continuous cost reduction, expansion of VA products and price increase across the whole Group
Architectural Glass	 Favourable demand and supply situation expected, while impact of higher energy cost and potential recession concerned in Europe and the USA Europe: price pass-through also continued while uncertainty of energy supply, input cost hike continuing. Recession concerned Asia: volume and price improving in Japan. Cold repair in Vietnam progressing NA: favourable domestic market expected though recession concerned due to interest rates hike SA: continued tight demand and supply environment. Contribution of new float furnace in Argentina SOP Solar energy glass: continued robust demand. New installation of online coating capacity in Malaysia
Automotive Glass	 Affected by car component shortage and higher input costs, despite strong vehicle demand, continuous negotiation for price increase Anticipating continued strong vehicle demand and car inventory replenishment Sales price improvement realizing gradually as negotiations with customers progressing further Continued component shortages to be resolved gradually although a little behind original forecast Cold repair in Maizuru completed, expected to contribute to profitability improvement from H2 Aiming for operating profit with cost reduction efforts, expansion of VA products and price increase offsetting higher energy and material costs
Technical Glass	 Continuous overall stable business environment for the time being Continued cost reduction efforts and better sales mix contributing to fine glass Monitoring impact of components shortage in customers for printer lens Stable demand mainly in replacement market for glass cord

Forecast for Financial Year ending 31 March 2023



Full-year revenue forecast revised upward based on relatively strong performance in H1. Operating profit forecast remained considering uncertainty with business environment in H2

(JPY bn)	2023/3 H1 fcst (Previous)	2023/3 H1 Act	2023/3 Full-year fcst (Previous)	2023/3 Full-year fcst (Revised)	2022/3 Full-year Act
Revenue	360.0	375.7	690.0	740.0	600.6
Operating profit	11.0	14.4	18.0	18.0	20.0
Exceptional items	2.0	(44.9)	2.0	(45.0)	3.6
Operating profit/(loss) after exceptional items	13.0	(30.5)	20.0	(27.0)	23.6
Finance expenses (net)	(6.0)	(6.6)	(13.0)	(13.0)	(12.5)
Impairment of financial receivables owed by joint ventures and associates	-	-	-	-	(3.4)
Share of JVs and associates' profits]	3.2]]	7.5
Other gains/(losses) on equity method investments	2.0	(0.7)	4.0	5.0	(3.4)
Profit/(loss) before taxation	9.0	(34.5)	11.0	(35.0)	11.9
Profit/(loss) for the period	4.0	(37.0)	5.0	(38.0)	6.8
Net profit/(loss) *	3.0	(38.8)	4.0	(41.0)	4.1



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

Transformation Initiatives under Revival Plan 24

Continued RP24 initiatives underway for business to grow sustainably. Maintaining shareholder's equity ratio above target even after large amount of impairment loss

Three Reforms

Business structure reform

- Installation of online coating capacity to existing float furnace in Malaysia to produce solar energy glass (Aiming at starting operation from 2024/3)
- New 2nd float furnace construction in Argentina successfully completed, starting production from Q3 to expand business in South America with market growth



New float furnace in Argentina

Two Key Initiatives

Restoration of financial stability (H1 2023/3)

- Maintaining shareholders' equity ratio above 15% after recording impairment of goodwill and intangible assets (JPY 48.8 bn) related to the Automotive business in Europe. Reducing financial risks lasted for a long time since the acquisition of Pilkington. Promoting the restoration of a strong financial base
- JPY 56.9 bn of cash and JPY 37.9 bn unused commitment lines at the end of September 2022

Transformation into more profitable business portfolio

• Integration of the Group's Automotive Glass business in China with a major Chinese automotive glass manufacturer contracted



4. Summary

Summary



1. Quarter 2 results of Financial Year ending March 2023

- Increased revenue and operating profit YoY, ahead of H1 forecast
- Continued strong performance in Architectural and Technical Glass. Partially realized price pass-through in Automotive
- Higher energy, materials and other costs offset by sales price and volume improvements
- Recording impairment loss in Automotive business Europe mainly due to interest rate rises. Reducing financial risk since the acquisition of Pilkington, toward the restoration of a strong financial base
- Maintaining shareholder's equity ratio above 15% more than RP24 target

2. Forecast for Financial Year ending March 2023

- Full-year revenue forecast revised upward reflecting relatively strong performance in H1 and weaker JPY
- Full-year operating profits forecast remained considering H2 business environment uncertainty
- Continuous impact of input cost increases anticipated, with higher energy costs and worldwide inflation trend
- Focusing on profitability improvement through continuous cost reduction, expansion of VA products and price increase across the whole Group

3. Update of Transformation Initiatives under Revival Plan 24

- <u>Business structure reform</u>: New 2nd float furnace construction in Argentina successfully completed, production contributing in H2
- Restoration of financial stability: Maintaining shareholders' equity ratio above 15% after recording impairment loss of goodwill and intangible assets related to the Automotive business in Europe
- <u>Transformation into more profitable business portfolio</u>: Integration of the Group's Automotive Glass business in China with a major Chinese automotive glass manufacturer contracted

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



- Consolidated Income Statement Quarterly Trend
- Revenue & Operating Profit Quarterly Trend
- Segmental Information by Quarter
- Revenue & Operating Profit by Region
- Foreign Currency Exchange Rates and Sensitivity
- Depreciation & Amortization, Capital Expenditures, R&D Expenditures
- Energy Cost Breakdown
- News Releases

Consolidated Income Statement – Quarterly Trend



(IDV by)		2021	L/3			202	2/3		2023	/03
(JPY bn)	Q1	Q2	Q 3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Revenue	91.9	129.7	135.8	141.9	147.7	143.0	152.3	157.6	177.9	197.7
Operating profit/(loss)	(0.6)	3.8	4.8	5.0	7.2	5.5	1.8	5.5	8.3	6.2
Operating profit margin	-	2.9%	3.5%	3.6%	4.8%	3.9%	1.2%	3.5%	4.6%	3.1%
Exceptional items (net)	(0.1)	(0.8)	1.0	(6.1)	(0.2)	4.7	(0.2)	(0.7)	2.3	(47.3)
Operating profit/(loss) after exceptional items	(12.2)	1.7	4.6	(3.1)	7.0	10.2	1.7	4.8	10.6	(41.1)
Finance expenses (net)	(2.4)	(3.0)	(2.1)	(3.5)	(2.9)	(2.9)	(3.2)	(3.4)	(2.8)	(3.7)
Share of JVs and associates' profits	(0.4)	0.2	1.0	1.3	1.5	1.9	2.2	1.9	2.2	1.0
Other gains/(losses) on equity method investments	-	-	-	-	-	-	-	(3.4)	(1.2)	0.5
Profit/(loss) before taxation	(14.9)	(1.1)	3.5	(4.7)	5.5	9.2	0.7	(3.6)	8.8	(43.4)
Profit/(loss) for the period	(16.5)	(0.7)	3.7	(2.8)	2.9	6.7	1.0	(3.8)	3.3	(40.3)
Net profit/(loss) *	(16.4)	(0.9)	3.4	(3.0)	2.5	6.1	0.0	(4.5)	2.4	(41.2)
EBITDA	6.1	12.7	13.5	14.5	16.5	14.6	11.1	14.4	18.0	16.1

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

Revenue & Operating Profit – Quarterly Trend





Segmental Information by Quarter



(170V.) \			2021/3					2022/3				2023/3	
(JPY bn)	Q1	Q2	Q3	Q4	Cum.	Q1	Q2	Q3	Q4	Cum.	Q1	Q2	Cum.
Revenue: Architectural	44.9	54.2	57.0	59.4	215.5	64.5	67.5	74.8	75.0	281.8	85.6	96.5	182.1
Europe	16.0	22.2	22.4	24.5	85.2	27.8	27.1	29.3	31.8	116.0	38.2	40.6	78.8
Asia	19.2	18.6	20.5	18.9	77.2	19.3	21.0	24.5	21.5	86.2	22.9	26.1	49.0
Americas	9.7	13.4	14.1	16.0	53.1	17.4	19.4	21.0	21.6	79.5	24.5	29.8	54.3
Operating profit	2.7	4.6	4.3	4.1	15.7	6.1	7.5	6.8	7.7	28.1	8.9	6.6	15.5
OP after COVID*	(2.2)	4.1	3.8	3.4	9.1	-	-	-	-	-	-	-	-
Revenue: Automotive	38.7	66.7	68.2	71.6	245.2	70.9	64.3	68.1	73.0	276.2	81.6	90.3	171.9
Europe	16.6	26.7	28.8	31.5	103.6	31.2	27.9	27.3	30.3	116.7	33.7	36.2	69.9
Asia	9.9	15.9	17.6	17.3	60.6	15.1	12.9	16.4	16.0	60.4	14.5	17.9	32.4
Americas	12.2	24.1	21.9	22.9	81.0	24.6	23.6	24.4	26.6	99.2	33.4	36.2	69.6
Operating profit	(2.9)	0.5	1.3	2.9	1.8	1.3	(2.3)	(4.9)	(2.0)	(7.9)	(0.7)	(1.0)	(1.7)
OP after COVID*	(9.3)	(0.6)	0.4	1.7	(7.8)	-	-	-	-	-	-	-	-
Revenue: Technical	8.1	8.4	10.1	10.2	36.8	11.4	10.3	9.1	9.0	39.8	9.9	10.2	20.2
Europe	1.3	1.4	1.8	1.9	6.4	2.1	1.8	2.0	2.0	7.9	2.1	2.5	4.6
Asia	6.5	6.7	8.0	8.1	29.3	9.0	8.2	6.8	6.6	30.6	7.5	7.3	14.8
Americas	0.3	0.3	0.3	0.3	1.1	0.3	0.3	0.3	0.4	1.3	0.4	0.5	0.8
Operating profit	1.4	1.1	2.0	2.2	6.7	2.8	2.9	2.1	2.1	9.9	3.2	2.5	5.7
OP after COVID*	1.2	1.0	2.1	2.2	6.5	-	-	-	-	-	-	-	-
Revenue: Other	0.2	0.4	0.5	0.6	1.7	0.9	0.8	0.3	0.7	2.7	0.8	0.7	1.5
Operating profit	(1.8)	(2.3)	(2.8)	(4.2)	(11.1)	(3.1)	(2.5)	(2.2)	(2.4)	(10.1)	(3.1)	(1.9)	(5.1)
OP after COVID*	(1.8)	(2.0)	(2.7)	(4.3)	(10.8)	-	-	-	-	-	-	-	-
Revenue: Total	91.9	129.7	135.8	141.9	499.2	147.7	143.0	152.3	157.6	600.6	177.9	197.7	375.7
Operating profit	(0.6)	3.8	4.8	5.0	13.1	7.2	5.5	1.8	5.5	20.0	8.3	6.2	14.4
OP after COVID*	(12.1)	2.5	3.6	3.0	(3.0)	-	-	-	-	-	-	-	-

*Operating profit after COVID-19 related exceptional items

Revenue & Operating Profit – by Region



	2022/3 H1				2023/3 H1	Change		
(JPY bn)	Revenue	%	Operating profit/(loss)	Revenue	%	Operating profit/(loss)	Revenue	Operating profit/(loss)
Europe	117.9	41%	2.9	153.3	41%	1.0	35.5	(1.8)
Asia	85.4	29%	9.8	96.1	26%	11.4	10.7	1.6
Americas	85.7	29%	5.6	124.7	33%	7.1	39.1	1.5
Other *	1.8	1%	(5.6)	1.5	0%	(5.1)	(0.3)	0.5
Total	290.7	100%	12.7	375.7	100%	14.4	85.0	1.7

^{*} Revenue and Operating loss of Other Operation are not split by geographical regions.

Foreign Currency Exchange Rates and Sensitivity

Average rates used

		202	1/3			202	2022/3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
GBP	133	135	136	139	153	152	153	153	163	163
EUR	118	121	123	124	132	131	131	130	138	139
USD	107	106	106	106	109	109	112	112	129	134
BRR	19.9	19.8	19.7	19.7	20.6	20.8	20.7	21.0	26.4	26.4
ARS	Closing rates are applied – hyperinflation									

Closing rates used

		202	1/3			2022/3				2022/3	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
GBP	132	135	141	152	153	150	156	160	165	161	
EUR	121	124	127	130	132	129	131	136	142	141	
USD	107	105	103	111	111	112	116	122	136	145	
BRR	19.9	18.7	19.8	19.1	22.3	20.6	20.4	25.5	26.2	26.7	
ARS	1.53	1.38	1.22	1.20	1.16	1.13	1.12	1.10	1.09	0.98	

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)	2022/3 Q2	2023/3 Q2	2023/3 Full-year Forecast
Depreciation & Amortization	18.4	19.7	39.0
Capital expenditures	10.2	17.6	40.0
Ordinary	9.3	15.1	
Strategic projects and other	0.9	2.5	
R&D expenditures	4.1	4.6	9.5
Architectural	1.2	1.4	
Automotive	1.2	1.3	
Technical Glass	0.5	0.5	
Other	1.2	1.4	

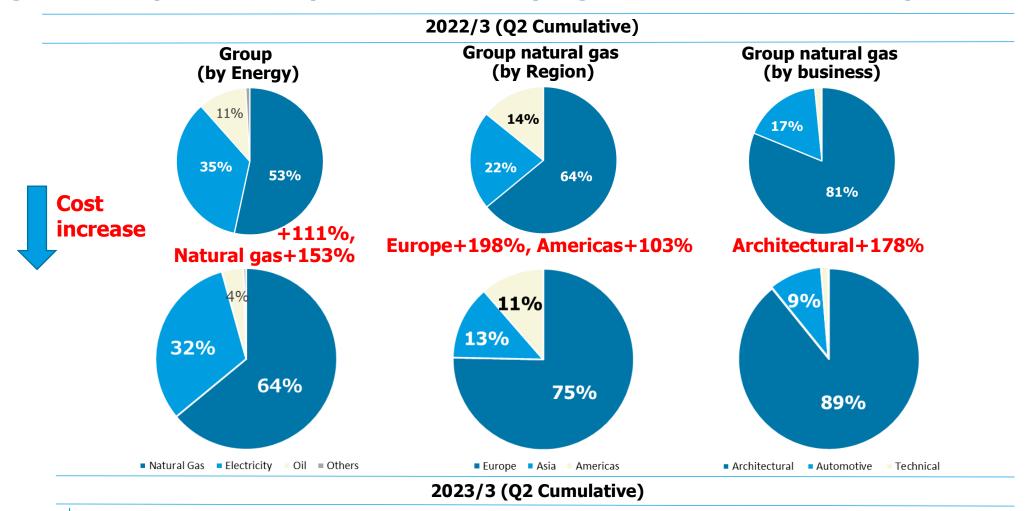
Energy Cost Breakdown (2022/3→2023/3)



Energy costs +111%* YoY for the Group, +153% for natural gas.

Natural gas prices remaining high, now accounting for 64% of the Group's total energy spend.

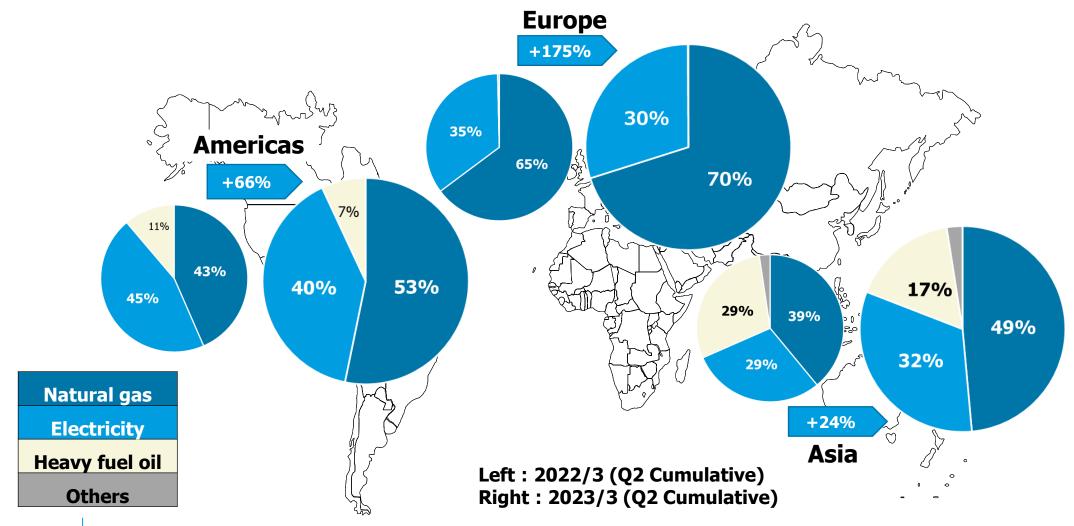
Significant impacts in Europe and Americas by region, and in Architectural by business



Energy Cost Breakdown (by region)



Significant impact to worldwide energy costs by natural gas price hike, especially in Europe and Americas



News Releases — May to October 2022



(https://www.nsg.com/en/media)

18-May-22	NSG Group Launches New High-Performance Materials Website
26-May-22	NSG Group - New Solar Array in Rossford, Ohio
31-May-22	Reform and Integration of Automotive Glass Business in China
28-Jun-22	SBTi Approves NSG Group's Revised GHG Reduction Target
8-Jul-22	Corporate Governance Report submitted to the Tokyo Stock Exchange
5-Aug-22	New Production Line of Solar Glass in Malaysia
22-Aug-22	Elegant, aurora-like luminosity is achieved with METASHINE® Aurora Series glass-flake effects pigments. Aimed primarily toward Point Makeup Cosmetics, NSG uses specially formulated Optical Brightening Materials.
13-Sep-22	ESG Website Wins Gomez Award
28-Oct-22	The 2nd Float Glass Plant Started Operation in Argentina

