



INTEGRATED REPORT 2020 (ARCHIVE)

Fiscal Year Ended March 31 2020

NSG Group Integrated Report 2020

Contents

Aiming for quick recovery of stable financial foundation and reform of business structure for sustainable growth

The integrated reports have been created in the form of electronic files rather than printed materials. Regarding Integrated Report 2020, we have decided not to produce it in booklet format as part of the business process reform under the influence of the spread of COVID-19 infection. We will provide the content scheduled to be published in the booklet on the website instead of publishing it on paper. This file is the archived version extracted from website.

CEO Message

--- (4)

While affected by the COVID-19 pandemic, we will concentrate our efforts to quickly recover the stable financial foundation and to reform the business structure for realization of sustainable growth.



CFO Message

--- (7)

While paying close attention to future demand for the liquidity, we will continue to reduce costs, control capital expenditure, and dispose non-core businesses and assets, aiming to reduce interest-bearing debt.



Group Overview

--- (11)

- Group Overview
- History

Financial, Non-financial Highlight

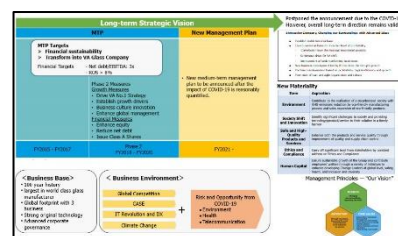
--- (14)

- Key Financial Data
- Non-financial Highlights



Management Policy, Business Environment and the Issues to be Addressed

--- (16)



Corporate Governance

--- (20)

- Interview with Chairman of the Board
- Board of Directors
- Approach
- Compensation for Executive Officers and Directors
- Ethics and Compliance



Risk Management

--- (49)

New Materiality

--- (51)

Sustainability --- (53)

CEO Message --- (54)

Approach to Sustainability --- (55)

Sustainability of NSG Group --- (56)

- Targets and Results
- Climate Change
- UN Global Compact
- Policy



Environment --- (69)

- Energy
- Air Emissions
- Water
- Materials
- Waste and Circular Economy
- Environmental Compliance
- Certification
- Suppliers



Social --- (97)

- Human Resources
- Inclusion and Diversity
- Employees
- Gender Pay Gap Reporting
- Health and Safety
- COVID-19
- Communities



Data for Environment/ Human Resources --- (118)

Evaluation by External Party --- (124)

Shareholder Information --- (127)

[Annual Consolidated Financial Statements 2020 \[PDF Link\]](#)

CEO Message

On behalf of the NSG Group, I sincerely thank you for your continued support. Please find below a summary of the Group's performance for the 154th fiscal period starting on 1 April 2019 and ending on 31 March 2020 (FY2020).

First, I would like to extend prayers to those who succumbed to COVID-19 and express the hope for a fast recovery of all who are infected with the disease or those adversely affected by the virus. At the same time, I would like to express gratitude and respect to all medical practitioners working hard to stop the expansion of pandemic and various other essential workers for their untiring efforts.



森 重樹

In the following, I would like to present an overview of the Group's performance for the 154th fiscal period ending on 31 March 2020 (FY2020), the changes in the state of business management under the influence of COVID-19 and the Group's future policy.

Overview of FY2020

The Group's performance was exacerbated further by the COVID-19 pandemic since January 2020.

In automotive glass business, both sales and trading profit fell short of the previous year due to the fluctuation in exchange rates and the decline in automotive production in Europe. In architectural glass business, in addition to the foreign exchange impact, the deteriorating market environment in Europe, Americas and Asia together with the impact of COVID-19 lead to a significant drop in sales and trading profit towards the end of the year. On the other hand, the demand for solar glass remained robust and we started operation of the second production line for solar glass in Vietnam in February. In technical glass business, some business areas suffered lower sales and trading profit than the previous year due to the challenging market situation. Also, the spread of COVID-19 affected the overall business negatively. However, stability was restored to a certain extent and the Fine Glass division achieved steady improvement towards the end of the year.

The Group's full-year sales in FY2020 stood at 556.2 billion yen (vs. 612.8 billion yen in FY2019) and trading profit at 21.2 billion yen (vs. 36.9 billion yen in FY2019). We recognized exceptional costs of 24 billion yen in FY2020 including the impairment loss of goodwill and intangible assets of automotive glass business in Europe and other regions to the tune of 11.7 billion yen. The profit attributable to the owners of the parent in FY2020 fell significantly from the previous year down to the net loss of 18.9 billion yen (vs. net profit of 13.3 billion yen in FY2019).

Initiatives in FY2021

We consider the impact of COVID-19 on the Group's performance will get worse in the first quarter of FY2021 than the fourth quarter of FY2020. Although the demand in general is expected to pick up gradually in the second quarter and onwards, the timing or extent of demand recovery is unclear, and we will need to stay on our toes throughout the period.

In case of urgency, we are negotiating with the financial institutions to secure additional liquidity funds though the Group's balance of cash and deposits stands at 43.6 billion yen and the unused amount of existing commitment line amounts to 65.5 billion yen. In order to mitigate the toughening business environment down the road, we will focus on minimizing cash outflow by strict management of working capital such as inventory reduction and freezing capital expenditure other than strategic investment and contingency items.

Also, we will curtail all kinds of expenses including voluntary reduction of compensation by the senior management team. In the manufacturing divisions, while ensuring the safety and health of employees, production facilities will be consolidated or downscaled, and line operation will be suspended in multiple sites. Additionally, non-core businesses and assets will be disposed of as appropriate on a continued basis. FY2021 annual forecast as well as the new Medium-Term Plan will be announced when it becomes possible for us to foresee the short to medium-term impacts of COVID-19 on our business.

Future Policy and Business Plan

A quick recovery of the stable financial foundation is an urgent task for the Group. To this end, we are taking the following steps to put in place the business structure capable of earning current profit and generate cash in a sustainable manner at an earliest possible date.

- To improve profitability rapidly by drastically reforming the cost structure of existing businesses and further accelerating the VA (value added) strategy
- To ramp up growth areas and new business development for their early contribution to profit
- To reduce debt by slashing overhead costs, restricting investment and disposing of non-core businesses/assets

In the medium term, we set out to transform our business makeup by clearly identifying the businesses to be maintained or expanded and those to be restructured assuming the world after COVID-19 will be fundamentally different economically and socially. I believe with the "corona crisis" as a turning point, people will get more concerned about the environment, health and sanitation. In this regard, it is highly likely that there will be growing needs for such VA products and technologies of ours as solar glass, switchable glass for controlling energy consumption, antibacterial/antivirus glass, PCR detector, and glass disk for a variety of high-speed, large capacity telecom devices.

Most recently, our PCR detector PicoGene®PCR1100 is attracting interests of health organizations, business enterprises and universities in several countries of the world and multiple inquiries are rolling in. In the area of antibacterial/antiviral area, Virus Clean™ is already in the market and expected to be adopted for a wide variety of applications for its excellent antimicrobial feature not only in hospitals and other facilities where sanitation is crucial but for various types of touch panels. Moreover, the Group has been successful in receiving an award from Innovative UK, the UK's innovation agency for its antiviral glass development project. Our efforts for development of new types of antiviral glass shall be further accelerated.

Capitalizing on these business opportunities, we strive to become more resilient to business cycles through transformation into more asset-light business structure, market-oriented product development and establishment of sales system, and creation of a lean and agile organization leveraging IT technology.

For Realization of Sustainable Growth

The NSG Group has been implementing COVID-19 infection prevention efforts, considering the safety and health of employees our top priority. While following the guidance of governments and other authorities all over the world, including social distancing, practicing gargling and hand-washing, wearing masks, implementing working from home, and limiting business travels, the Group has been trying to figure out ways to raise our business efficiency. Especially, the use of telework will contribute to our "Work-style Reform" and therefore, we will continue our efforts to bring about a better work environment with improved safety and security.

Also, the Group's target for greenhouse gas reduction, which was set in August 2019, aims to reduce greenhouse gas emissions (Scope 1 and Scope 2*) by 21% compared to the 2018 level by 2030. This target was approved by the Science Based Targets initiative (SBTi)** as "a science-based target to limit the average rise of global temperature to below 2°C from pre-industrial revolution levels" in line with the goals of the Paris Agreement. The Group formerly targeted to reduce CO2 emissions per production unit by 1% per year; however, by increasing the target to 2%, NSG will continue its contributions to mitigate climate change risks through the reduction of CO2 emissions from business operations and the supply of innovative glass products.

Dividend

Concerning the yearend dividend of common shares for FY2020, we regretfully have decided not to declare it, taking into consideration the business results and the financial situations of the Group as well as other factors comprehensively. We are deeply sorry and sincerely apologize to our shareholders. The Group recognizes the importance of dividends to our shareholders and will concentrate our efforts to improve our

profitability toward the resumption of dividend payment as early as possible. We look forward to the continuing support and encouragement of our shareholders.

*Scope1: Direct emissions by business operators (Use of fuel in manufacturing processes, etc.) *Scope2: Indirect emissions by consumption of energy sources (Purchased electricity used in manufacturing processes, etc.)

**SBTi is a partnership between CDP (former Carbon Disclosure Project), UN Global Compact, WRI (World Resources Institute) and WWF (World Wildlife Fund), which helps companies set the science-based goals for reducing GHG emissions to prevent the impact of climate change.

July 2020
Shigeki Mori
Representative Executive Officer
President and CEO
Nippon Sheet Glass Co., Ltd.

CFO Message

"While paying close attention to future demand for the liquidity, we will continue to reduce costs, control capital expenditure, and dispose non-core businesses and assets, aiming to reduce interest-bearing debt."



Reiko Kusunose
Chief Financial Officer

Business Results for the Financial Period Ended on 31 March 2020 (FY2020)

The Group experienced increasingly difficult trading conditions in its core markets during the year with underlying market conditions deteriorating from the third quarter. COVID-19 impacted the Group's Technical Glass business from January 2020 and severely impacted the Group's Automotive and Architectural businesses from March 2020. In some regions, vehicle production fell to near-zero levels towards the end of the year, as the Group's main automotive customers temporarily ceased production, particularly at plants in Europe and the Americas. Vehicle production continued at customers in Asia, albeit at much reduced levels. In Architectural, construction activity also weakened significantly towards the end of the year in response to COVID-19 lockdown restrictions, particularly in Europe and South America, but also in other regions. Demand for Solar Energy glass remains robust. Conditions facing the Group's Technical Glass business were also negatively impacted by COVID-19, although conditions began to stabilize somewhat by the end of the year.

Review by Business Segment

The Group's business lines cover three core product sectors: Architectural, Automotive, and Technical Glass.

Architectural, representing 42 percent of cumulative Group sales, includes the manufacture and sale of flat glass and various interior and exterior glazing products within the commercial and residential markets. It also includes glass for the Solar Energy sector.

Automotive, with 51 percent of Group sales, supplies a wide range of automotive glazing for new vehicles and for replacement markets.

Technical Glass, representing 7 percent of Group sales, comprises several discrete businesses, including the manufacture and sale of very thin glass used as cover glass for displays, lenses and light guides for printers, as well as glass fiber products, such as battery separators and glass components for engine timing belts.

Other operations include corporate costs, consolidation adjustments, certain small businesses not included in the segments covered above and the amortization of other intangible assets related to the acquisition of Pilkington.

The business results by business segment for the fiscal years ended 31 March 2020 and 31 March 2019, are summarized as in the table below.

(Millions of yen)

	Revenue		Operating profit before exceptional items	
	FY2020	FY2019	FY2020	FY2019
Architectural	233,687	247,348	17,331	25,811
Automotive	280,977	314,645	6,100	15,118
Technical Glass	40,143	49,106	7,116	8,062
Other operations	1,371	1,690	(9,370)	(12,136)
Total	556,178	612,789	21,177	36,855

Architectural

The Architectural business recorded revenues of ¥ 233,687 million (4Q FY2019: ¥ 247,348 million) and operating profit before exceptional items of ¥ 17,331 million (4Q FY2019: ¥ 25,811 million).

Architectural revenues fell from the previous year, mainly due to the translational impact of foreign exchange movements. Currency effects, together with the impact of increasingly challenging market conditions also led to a reduction in reported profits.

In Europe, representing 37 percent of the Group's architectural sales, revenues fell, due to lower volumes and restructuring projects concluded during the previous year, together with the impact of foreign exchange movements. Prices weakened from the third quarter, reflecting capacity additions in the region. Profits also fell in line with the lower prices, reduced volumes, and currency effects. Volumes declined sharply towards the end of the year due to the COVID-19 pandemic.

In Asia, representing 39 percent of the Group's architectural sales, revenues were similar to the previous year with increased dispatches of solar energy glass largely offsetting difficult domestic markets. Revenues from conventional architectural glass in Japan remained stable, and underlying profitability in Japan was also positive, although reported profits were hit by a one-off inventory valuation adjustment in an earlier quarter. On 31 March 2020 the Group announced the suspension of the Chiba #1 furnace effective from July 2020. On 30 January 2020 the Group announced the commencement of production at its second furnace in Vietnam dedicated to the production of glass for Solar Energy.

In the Americas, representing 24 percent of the Group's architectural sales, revenues and profits were below the previous year. Domestic market conditions in North America were more challenging than the previous year, with increased flat glass supply causing an erosion of market prices. Sales of glass for solar energy improved, however. In South America, revenues fell mainly due to the translational impact of foreign exchange movements. In addition, volumes were impacted by COVID-19 towards the end of the year.

Automotive

The Automotive business recorded sales of ¥ 280,977 million (4Q FY2019: ¥ 314,645 million) and operating profit before exceptional items of ¥ 6,100 million (4Q FY2019: ¥ 15,118 million).

In the Automotive business, revenues and profits were below the previous year due to the translational impact of foreign exchange movements, together with a decline in new car production in Europe.

Europe represents 43 percent of the Group's automotive sales. Revenues and profits fell, due mainly to a reduction in volumes as a result of declining light-vehicle build levels. Volumes were significantly affected by COVID-19 related stoppages at customer's plants towards the end of the year.

In Asia, representing 24 percent of the Group's automotive sales, revenues were below the previous year, and profits also declined. In Japan, revenues were below the previous year, as an improvement in sales volumes during the first two quarters was more than offset by a reduction from the third quarter after the imposition of increased sales taxes from 1 October 2019. Profits also fell from the previous year, being impacted by raw glass cost increases and the reduction of volumes from the third quarter.

In the Americas, representing 33 percent of the Group's automotive sales, revenues fell due to the translational impact of foreign exchange movements and weakening market conditions particularly towards the end of the year with a significant impact from the COVID-19 pandemic. In North America, despite OE

volumes being slightly below the previous year, profits strengthened, benefitting from further manufacturing efficiency improvements. Profitability in South America was similar to the previous year.

Technical Glass

The Technical Glass business recorded revenues of ¥ 40,143 million (4Q FY2019: ¥ 49,106 million) and operating profit before exceptional items of ¥ 7,116 million (4Q FY2019: ¥ 8,062 million).

Revenues and profits fell in the Technical Glass business due to the challenging market conditions in some areas.

In the fine glass business, continued cost reduction efforts and a better sales mix provided a strong foundation for further improvement in results. In the information devices business, demand for glass components used in printers and scanners declined. Demand for glass cord used in engine timing belts fell, reflecting conditions in the automotive sector generally, particularly towards the end of the year. Results in the battery separator business remained stable.

Other

Other Operations and Eliminations recorded revenues of ¥ 1,690 million (Q4 FY18 restated ¥ 1,074 million) and operating costs of ¥ 12,136 million (Q4 FY18 restated cost of ¥ 10,226 million).

This segment covers corporate costs, consolidation adjustments, certain small businesses not included in the segments covered above and the amortization of other intangible assets related to the acquisition of Pilkington plc.

Joint ventures and associates

The Group's share of joint ventures and associates' profits after tax was ¥ 1,077 million (4Q FY2019: ¥ 6,244 million).

The Group's share of joint ventures and associates' profits was below the previous year, due partly to the non-recurrence of a one-off gain recorded during the second quarter of the previous year at Cebrace, the Group's architectural joint venture in Brazil, following the conclusion of a legal challenge regarding the calculation of sales-based taxes. In addition, underlying results also fell as the Group's joint ventures and associates faced increasingly difficult market conditions towards the end of the year.

Financial Position

The Group's forecasts and projections show that the Group is able to continue to operate within existing financial facilities. The Group will enter renewal negotiations with its providers of finance before such facilities fall due. In discussions with its bankers on future borrowing requirements, no matters have been drawn to the Group's attention to suggest that renewal would not be forthcoming on acceptable terms. After making enquiries, the directors have reasonable expectation that the Group will have adequate resources to continue in operational existence for the foreseeable future. Accordingly, the Group continues to apply the going concern basis in preparing these financial statements.

1. Total assets

Total assets at the end of March 2020 were ¥ 765,197 million, representing an increase of ¥ 3,328 million from the end of March 2019. The increase in assets was largely caused by the recognition of Right-of-Use assets, within Property, Plant & Equipment, as a result of the adoption of IFRS16 "Leases".

2. Net debt

Net financial indebtedness increased by ¥ 72,468 million from 31 March 2019 to ¥ 390,169 million at the period end. The increase in indebtedness arose from the adoption of IFRS16, and also from capital expenditure in growth investment projects. Gross debt was ¥ 435,007 million at the period end. As of 31 March 2020, the Group had un-drawn, committed facilities of ¥ 65,511 million.

3. Net assets

Total equity was ¥ 88,194 million, representing a decrease of ¥ 44,312 million from the March 2019 figure of ¥ 132,506 million. Total equity fell mainly as a result of the strengthened yen when compared to many of the Group's currencies, the loss recorded for the period and the acquisition and cancellation of Class A shares.

4. Other indices

Basic net profits per share worsened from a profit of ¥ 115.16 in the previous year, to a loss of ¥ 235.96 in FY2020. Earnings per share are calculated by taking the profit attributable to owners

of the parent together with dividends relating to Class A Shares, and dividing this by the weighted average number of ordinary shares in issue during the year. In FY2020, dividends relating to Class A Shares of ¥ 1,700 million have been included in this calculation (FY2019: ¥ 2,114 million).

Cash Flow

Cash inflows from operating activities were ¥ 30,444 million. Cash outflows from investing activities were ¥ 56,888 million, including capital expenditure on property, plant, and equipment of ¥ 60,868 million. Capital expenditure increased due to the progression of strategic investment projects in the U.S., Vietnam and Argentina. As a result, free cash flow was an outflow of ¥ 26,444 million.

After taking into account the effect of financing cash flows and movements in exchange rates, cash and cash equivalents at the end of the year decreased by ¥ 9,780 million year-on-year to ¥ 40,512 million.

Financial Policy

The current economic environment has led to a severe disruption of the Group's normal business activity. In response to the COVID-19 pandemic and a lack of demand for glass, the Group has taken appropriate action to suspend or reduce production at various plants with the utmost priority on health and safety of its employees. The Group is focused on saving cash costs in a variety of areas and is also actively seeking government assistance where such programs are available. The Group will continue its programs of disposing of non-core assets and improving the efficiency of working capital. Additionally, the Group will prioritize capital expenditure to focus on strategically important and urgent projects, suspending expenditure on other projects where appropriate.

Whilst noting the robust liquidity position as at 31 March 2020, the Group is mindful of its liquidity needs going forwards in the current distressed market conditions. The Group is in discussions with its providers of finance to ensure that sufficient liquidity will continue to be available.

The Group recognizes the improvement of its financial stability is critical and urgent. It will continue to make efforts to enhance its profitability and cash flow by fundamentally reforming the cost structure of existing businesses while accelerating new business development with the reinforcement of R&D and Business Innovation Center activities. In addition, it will control capital expenditure and dispose non-core businesses and assets to reduce interest-bearing debt. With these measures the Group aims to recover its business to be able to generate sustainable profit and cash.

Dividend Policy

The Group's dividend policy is to secure dividend payments based on sustainable business results. Once and after all Class A Shares have been redeemed and cancelled, while the Group maintains this basic policy in all respects, the Group will continue to use the sincere efforts to declare dividends with introduction of consolidated dividend payout ratio of 30% as a guide.

The Articles of Incorporation of Nippon Sheet Glass Co., Ltd. (the Company) stipulate the record date for the ordinary dividends at 31 March and 30 September, and that decisions on dividends shall be based on Article 459 Paragraph 1 of the Companies Act, and that dividends on surpluses may be paid based upon a resolution of the Board of Directors without requiring a resolution of the General Meeting of Shareholders. After considering the factors such as the current Group's financial position and its level of profitability, the Board of Directors regrettably have decided not to declare a dividend for the year to 31 March 2020. The Group recognizes the importance of dividends to its shareholders and anticipates resuming dividend payments when the financial performance of the Group allows. The Board of Directors resolved to distribute the designated amount of dividends for Class A Shares.

Group Overview

NSG Group is one of the world's leading manufacturers of glass and glazing systems in the business areas: Architectural, Automotive and Technical Glass.

Float plants: 27 operated by NSG Group	Automotive plants: 24 in 14 countries	Technical Glass plants: 11 in 5 countries
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Founded in 1918, NSG acquired the leading UK-based glass manufacturer Pilkington plc in June 2006. Today, the Company has combined sales of around JPY 600 billion, sales in over 100 countries, employing some 27,000 people worldwide.

NSG Group has major market shares in most building and automotive product markets of the world, with a broad geographic reach, enabling it to respond to customers whose Operations, particularly in the case of Automotive OE, are increasingly global.

We produce high-quality glass products that make an important contribution to improving living standards, to people’s safety and well-being and to the generation and conservation of energy.

Businesses

Global Three Businesses: Architectural, Automotive, and Technical Glass

<p>Architectural: 42%</p> <p>■ Europe ■ Asia ■ Americas</p> <p>Products:</p> <ul style="list-style-type: none"> - Building glass & glazing - Glass for solar panels <p>Business:</p> <ul style="list-style-type: none"> - 27 float lines operated globally - Leading supplier for thin film solar panels <p>Granroof at Tokyo Station</p>	<p>Automotive: 51%</p> <p>■ Europe ■ Asia ■ Americas</p> <p>Products:</p> <ul style="list-style-type: none"> - Glazing for new vehicles - Glazing for replacement markets <p>Business:</p> <ul style="list-style-type: none"> - Key operations in 14 countries - Supplying world's leading vehicle manufacturers - Key player globally in automotive aftermarket (AGR) glazing distribution and wholesale <p>Complex-shaped back light Courtesy of TOYOTA Global Newsroom</p>	<p>Technical Glass: 7%</p> <p>Products:</p> <ul style="list-style-type: none"> - Thin glass for display etc. - Lenses for printers and light guide - Special glass fiber such as battery separators, glass code for car engine timing belt, etc. <p>Business:</p> <ul style="list-style-type: none"> - Key operations in Asia and Europe - Unique 'Number One' and 'Only One' niche products <p>Super Glass Paper™</p>
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100 Years of History

1920s - 1940s

Capacity expansions.

Nov1918

America Japan Sheet Glass Co., Ltd. was established in Osaka Japan

1920

New capacity added at Kitakyushu

1931

Company name changed to Nippon Sheet Glass Co Ltd

1935

New plant at Yokkaichi



Futajima Plant in Fukuoka, Japan

1950s-1960s

Production capacity and capability increases.

Full scale entry to the Automotive glass business.



First piece of float glass ever made in Asia



Maizuru Plant in Kyoto, Japan

1950

Company shares listed in Tokyo and other stock exchanges in Japan

1951

New plant at Maizuru

1963

New plant at Chiba

1965

Float glass production commenced in Asia with technology licensed from Pilkington

1970s-1990s

Automotive glass business growth and Globalization of Architectural and Automotive Glass businesses.

Focus on new products and technologies.

Overseas investments as foundation of the Technical Glass business.



The SELFOCTM is still core technology in NSG

1968

SELFOCTM™ was developed

1970

Manufacturing footprints expanded in Kanagawa and Kyoto

1971

The first overseas investment in Malaysia

1975

Automotive joint venture established in Mexico

1978

Thin glass UFF™ production start

1979

Launch of the glass fiber business

1979

NSG Foundation established to commemorate the 60th anniversary of the Company

1986

Automotive joint venture established in the US

1990s-Today

Further business expansion in Asia.

Closer business relationship with Pilkington.



1990

A 20 per cent stake of LOF acquired

1995

An Automotive joint venture established in China and an Architectural joint venture in Vietnam

2000

A share of Pilkington acquired

2001

Increase in Pilkington shareholding to 20 per cent. Pilkington became an affiliate of the Company

2004

Company headquarters moved to Tokyo

2006

Acquisition of Pilkington plc

2007

Second Architectural joint venture established in Vietnam

2008

2008 Company's Corporate Governance Structure changed to three committees

2014

Long term strategic vision and medium-term plan (MTP) launched

2017

MTP redefined and MTP Phase 2 began covering FY2018 – FY2020

Nov 2018

100th Anniversary



Financial, Non-financial Highlight

Financial Highlights

Consolidated Income Statement	Unit	2016/3	2017/3	2018/3	2019/3	2020/3
Revenue	million yen	629,172	580,795	598,897	612,789	556,178
Trading Profit	million yen	27,175	33,062	37,663	38,824	23,018
Profit before Taxation	million yen	(37,439)	14,751	22,146	22,730	(13,549)
Profit Attributable to Owners of the Parent	million yen	(49,838)	5,605	6,164	13,287	(18,925)
Trading Profit Ratio to Revenue	%	4	6	6	6	4
Profit Attributable to Owners of the Parent Ratio to Revenue	%	(8)	1	1	2	(3)
ROE	%	(36)	5	5	10	(19)
ROA	%	3	4	5	5	3

By Business Segment (Revenue)	Unit	2016/3	2017/3	2018/3	2019/3	2020/3
Architectural	million yen	262,559	237,722	237,966	247,348	233,687
Automotive	million yen	316,327	296,560	311,428	314,645	280,977
Technical Glass	million yen	49,490	46,088	48,429	49,106	40,143
Others	million yen	796	425	1,074	1,690	1,371

By Business Segment (Profit)	Unit	2016/3	2017/3	2018/3	2019/3	2020/3
Architectural (Trading Profit)	million yen	24,560	27,044	26,246	25,811	17,331
Automotive (Trading Profit)	million yen	9,813	12,654	14,209	15,118	6,100
Technical Glass (Trading Profit)	million yen	267	1,756	5,403	8,062	7,116
Others (Trading Profit)	million yen	(7,465)	(8,392)	(8,196)	(10,167)	(7,529)
Architectural (Profit Ratio to Revenue)	%	9	11	11	10	7
Automotive (Profit Ratio to Revenue)	%	3	4	5	5	2
Technical Glass (Profit Ratio to Revenue)	%	1	4	11	16	18

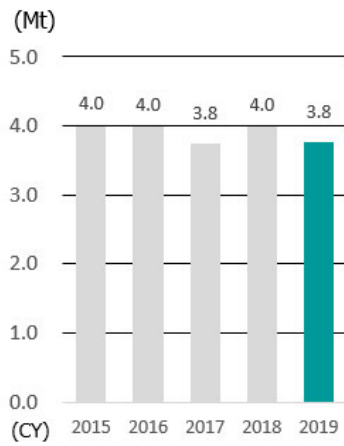
Balance Sheet	Unit	2016/3	2017/3	2018/3	2019/3	2020/3
Total Assets	million yen	812,120	790,192	788,592	761,869	765,197
Interest-bearing Debt	million yen	436,959	399,386	372,654	371,508	435,007
Net Debt	million yen	381,044	313,254	306,471	317,700	390,169
Shareholders' Equity	million yen	103,109	124,146	135,192	123,760	73,612
Shareholders' Equity Ratio	%	13	16	17	16	10

Cash Flows	Unit	2016/3	2017/3	2018/3	2019/3	2020/3
Cash Flows from Operating Activities	million yen	21,789	30,429	34,716	29,030	30,444
Cash Flows from Investing Activities	million yen	(26,401)	(10,152)	(17,912)	(28,143)	(56,888)
Free Cash Flow	million yen	(4,612)	20,277	16,804	887	(26,444)
EBITDA	million yen	60,311	62,051	63,564	64,732	55,023
Net Debt/EBITDA		6	5	5	5	7
Capital Expenditure	million yen	(28,192)	(28,013)	(35,512)	(32,150)	(66,971)
Depreciation & Amortization	million yen	40,949	32,189	29,436	27,910	34,842

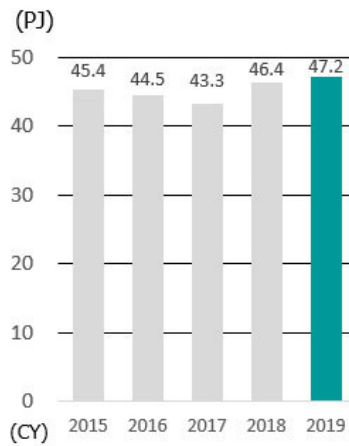
Per Share	Unit	2016/3	2017/3	2018/3	2019/3	2020/3
Earnings per Share	yen	(55)	62	48	115	(236)
Book Value per Share	yen	1,141	942	1,043	979	471
Cash Flow per Share	yen	(5)	224	186	10	(292)

Non-financial Highlights

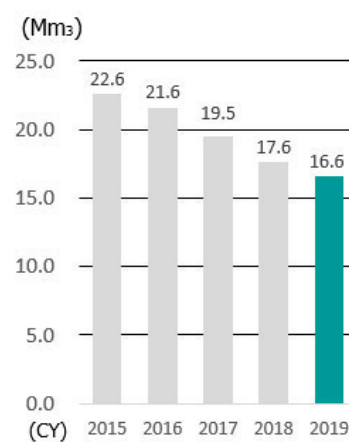
CO₂ emissions



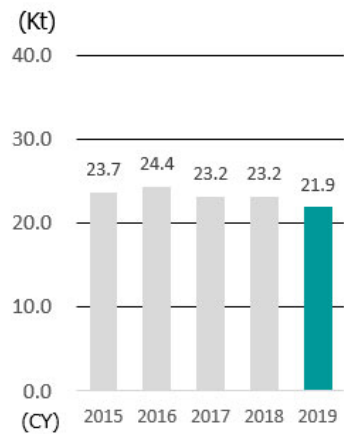
Energy Usage



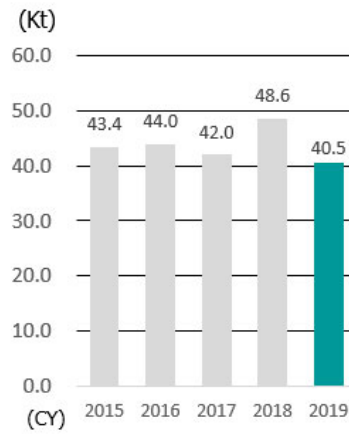
Water Usage



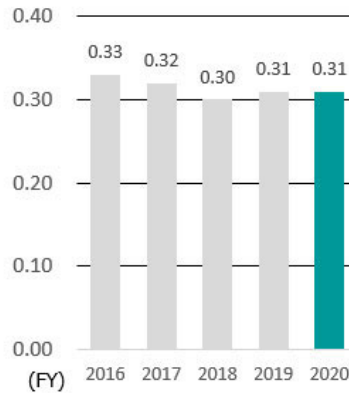
Operational waste to landfill*



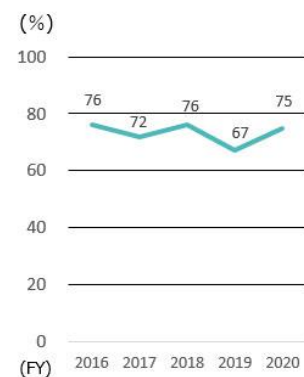
Recycling (not glass)



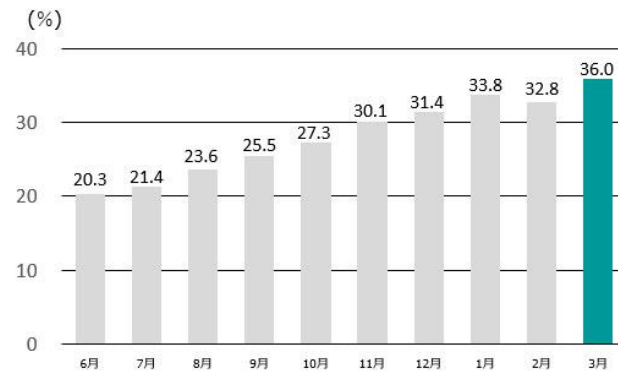
Significant injury rate (SIR)



Employee engagement



FY20 Supplier Spend Assessed by EcoVadis**



* Indicates total amount of glass and non-glass landfill waste

** Procurement spend basis

Management Policy, Business Environment and the Issues to be Addressed

Postponed the announcement due to the COVID-19
However, overall long-term direction remains valid

Long-term Strategic Vision

MTP	New Management Plan
<p>MTP Targets</p> <ul style="list-style-type: none"> > Financial sustainability > Transform into VA Glass Company <p>Financial Targets</p> <ul style="list-style-type: none"> - Net debt/EBITDA: 3x - ROS > 8% <p>Phase 2 Measures</p> <p>Growth Measures</p> <ul style="list-style-type: none"> • Drive VA No.1 Strategy • Establish growth drivers • Business culture innovation • Enhance global management <p>Financial Measures</p> <ul style="list-style-type: none"> • Enhance equity • Reduce net debt • Issue Class A Shares 	<ul style="list-style-type: none"> • New medium-term management plan to be announced after the impact of COVID-19 is reasonably quantified.
FY2015 - FY2017	Phase 2 FY2018 - FY2020
	FY2021 -


Innovation Company, Changing our Surroundings with Advanced Ideas

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- Continuous drive for VA shift
- Improvement of underperforming businesses
- New business development led by SIC to drive the Group's growth
- Portfolio reformation based on profitability, capital efficiency and growth
- Promotion of lean and agile organization and culture

New Materiality

Item	Aspiration
Environment	Contribute to the realization of a decarbonized society with GHG emissions reduction by eco-friendly manufacturing process and sales expansion of eco-friendly products
Society Shift and Innovation	Identify significant challenges to society and providing technology/product/service to their solution in a timely fashion
Safe and High-Quality Products and Services	Enhance both the products and service quality through improvement of quality and supply chain control
Ethics and Compliance	Carry off significant trust from stakeholders by constant address on Ethics and Compliance
Human Capital	Ensure sustainable growth of the Group and contribute employees' welfare through a variety of initiatives to enhance developing Change Leaders at global level, safety, health, and Inclusion and Diversity

Management Principles — "Our Vision"



< Business Base >

- 100 year history
- largest in world class glass manufacturer
- Global footprint with 3 business
- Strong original technology
- Advanced corporate governance

< Business Environment >

Global Competition

CASE

IT Revolution and DX

Climate Change

+

Risk and Opportunity from COVID-19

- Environment
- Health
- Telecommunication

1. Business Environment and Issues to be Addressed

The current pandemic of novel coronavirus is not only threatening the health and lives of people across the globe but also affecting the global economy significantly. It likely impacts on both manufacturing and consumption for the next several years. The Group's core businesses – Architectural and Automotive have been considerably affected and the Group will carefully watch demand trends going forward. The longer-term trend is going to be more commoditization and lower prices of flat glass products with the higher presence of glass manufacturers in emerging markets. On the other hand, expectations for new kinds of glass products are increasing, which can contribute to the environment and people's health and safety, further to the once-in-a-century technical innovation in the automotive industry. In addition to the momentum toward information technology revolution and digital transformation to date, the post-COVID-19 work and lifestyle would lead us to much more expectation that glass materials could make a contribution in fields such as life science, IoT and cloud computing.

The Group views these changes as an innovative opportunity to transform its business structure, responding to them agilely and flexibly and adapting to the new business environment.

2. Management Principle

The NSG Group announced its new management principle "Our Vision" at the company's 100th anniversary in 2018. "Our Vision" comprises the Mission (core purpose), Aspiration (desired future position) and Core Values (the basis on which work and conduct ourselves).

With "Our Vision," The NSG Group is striving to realize a sustainable society by offering new values and services with

Our Vision



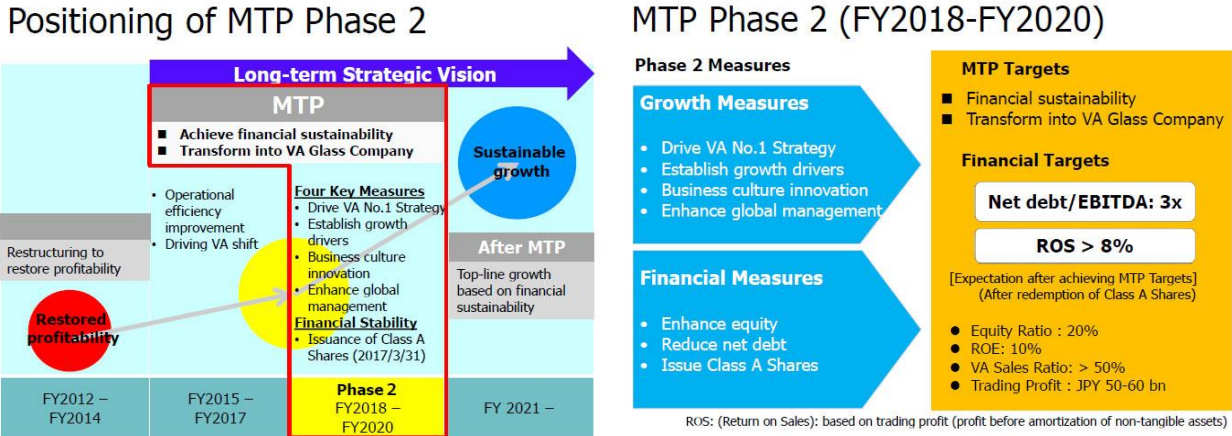
glass swiftly and appropriately to meet the growing needs of our customers and society.

3. Long-Term Strategic Vision, Medium-term Plan (MTP) Phase2 and its Review

(1) Long-Term Strategic Vision and Medium-Term (MTP) Phase2

Based on the Group's Long-Term Strategic Vision announced in May 2014 to transform NSG Group into a VA Glass Company (VA stands for value-added), the NSG Group developed and executed the Medium-term Plan (MTP) Phase 2 over a three-year period from FY2018 to FY2020. The objectives of MTP Phase 2 were to achieve financial sustainability and start the transformation into the VA Glass Company. The two financial targets were net financial debt/EBITDA of lower than 3x and operating return on sales (ROS) of greater than 8 percent*.

*ROS: based on trading profit (profit before amortization of non-tangible assets)



(2) Review of MTP Phase 2

Since the start of MTP in FY2015, the Group's profitability improved steadily, and the VA shift progressed during the first half of MTP Phase 2. With the growth measures to pursue the "VA No. 1" strategy, the Group successfully established an advantageous position in the field of online coating in the Architectural Glass business and was increasingly awarded new business of VA glass in automotive business.

Financially, the Group improved the equity ratio by issuing Class A Shares in 2017; achieved the target to reduce financial expenses one year earlier; and resumed dividend distribution for the first time in the last six years and thereby, successfully contributing to the improvement of net profitability.

In order to further expedite the growth with strategic investment, the Group decided to expand manufacturing facilities for solar panels in Vietnam and North America and to construct a new float plant in South America (Argentina), a promising emerging market. The float line in Vietnam started operation in February 2020.

In order to accelerate new business development and create new customer value, the Business Innovation Center was established in July 2018.

Although the Group steadily improved the profits up to FY2019 as mentioned above, it has been severely impacted by the sharp drop of automotive production in Europe and the deterioration of supply and demand balance in architectural glass markets since the beginning of FY2020. As a result, the Group failed to achieve the financial targets of MTP Phase 2 in FY2020, the final year of MTP Phase2.

(3) Open Issues in View of the Previous MTP Phase 2

In the review of MTP Phase2 based on the achievements mentioned above, the Group has identified the following issues to be addressed and approach to them as follows.

Review of MTP Phase 2	Approach
<p>Stronger business less vulnerable to economic fluctuations</p> <ul style="list-style-type: none"> • Even with the VA sales ratio of 46%, still bound to commodity-centric and price-competitive business model • Insufficient reduction in fixed cost ratio 	<ul style="list-style-type: none"> • Increasing "number one" and "only one" products • Promotion of leaner-asset management
<p>Top line growth based on launches of new products</p> <ul style="list-style-type: none"> • Accelerated with the establishment of BIC but not enough 	<ul style="list-style-type: none"> • Reinforcement of R&D including BIC
<p>More stable financial foundation</p> <ul style="list-style-type: none"> • Delay in improvement, while equity enhanced with Class A Shares 	<ul style="list-style-type: none"> • Improvement of business profitability • Capital expenditure within depreciation • Disposals of non-core business/assets

4. Next Steps and Business Plan

(1) Challenges and Mitigation Plan against the Coronavirus Pandemic

The most urgent and critical challenge for the Group now is how it mitigates the adverse impact on the business due to the novel coronavirus infection spread worldwide.

Currently, the Group's main businesses – Architectural and Automotive are severely suffering the impact across the world in the uncertainties of the pandemic.

In light of these circumstances, the employees' safety and health are our first priority, and the Group has formed the management structure to enable agile decision makings by the local management of each region and implemented the following emergency actions.

Safety Measures for Employees and Their Family	<ul style="list-style-type: none"> • Establishing and maintaining workplace to prioritize safety of employees and their family first and foremost • Creating and following the guidelines to prevent the spread of infection within the Group in accordance with the government policy of each country the Group in accordance with the government policy of each country
Funding Activities	<ul style="list-style-type: none"> • Securing cash position and unused commitment lines and if necessary, additional funding • Freezing new capital expenditure except most critical projects • Minimizing discretionary spending and maximize utilization of government subsidies
Production Mitigation	<ul style="list-style-type: none"> • Temporary line suspension and layoffs and furloughs in response to declining demand • Preparation for flexible restart of operation including the introduction of additional safety measures as demand recovers

With a possibility of prolonged influence in mind, the Group will continue to review its business direction from time to time.

(2) Enhancement of Financial Foundation

The Group recognizes that the improvement of its financial stability is critical and urgent. It will continue to make efforts such as below to recover its equity ratio, which declined in FY2020.

1. Recovery and improvement of profitability

In order to enhance its profitability and cash flow, the Group will reinforce profitable businesses and reform the cost structure of underperforming businesses drastically, while accelerating new business development with the reinforcement of R&D and Business Innovation Center activities.

2. Reduction of interest-bearing debt

The Group will control capital expenditure and dispose non-core businesses and assets to reduce interest-bearing debt.

(3) New Medium-term Management Plan and Long-term Direction

The Group has decided to postpone the announcement of a new medium-term management plan, which was planned to start in FY2021, considering the current uncertainties of our business environment due to the novel coronavirus pandemic.

However, the Group believes its overall long-term direction remains valid, but will be re-confirmed once the longer-term impact of the pandemic is better understood. The broad direction is shown below.

Innovation Company, Changing our Surroundings with Advanced Ideas

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- Core business as basis for a certain level of profitability
 - Contribution from the strategic investment projects
 - Continuous drive for VA shift
 - Improvement of underperforming business
- New business development led by BIC to drive the Group's growth
- Portfolio transformation based on profitability, capital efficiency and growth
- Promotion of lean and agile organization and culture

Even when the current coronavirus pandemic subsides, our society and economy may change drastically in future. Irrespective of such changes, however, the Group believes that its strengths will continually enable us to make a contribution in fields such as; environment (glass for solar panels, energy saving glass for ZEB and ZEH); health and welfare (PCR test device and antivirus glass); and increased telecommunication demands associated with new working styles (optical telecom devices).

Despite the current uncertain and ambiguous socio-economic circumstances, the Group will make its best effort in solidarity to transform the business structure into the one suitable for sustainable growth under the new management principle – "Our Vision."

(4) New Materiality Defined for Sustainable Growth

Based on "Our Vision", the Group redefined the Materiality in the process of discussion in trying to formulate a new mid-term management plan. [\(Click here for detail\)](#)

Corporate Governance

Interview with Chairman of the Board

"The Board of Directors should always keep an eye on such signs of changes in the business environment and their effects on the essential business structure of the Group. By discussing them comprehensively, it can supervise towards the right direction."



Yasuyuki Kimoto
Independent External Officer

Q1 : As the newly appointed Chairman of the Board of Directors, which welcomed three new External Directors in July this year, what are your aspirations for how you will operate the Board of Directors going forward.

A1 : It has been four years since I became a Director of the Company, which has adopted the committee-based governance structure. The Board of Directors consists of nine members, six of which are External Directors and the chairman of which is an Independent External Director. I feel that the Directors have had very frank and open discussions over the past four years, led by the External Directors and we should not change the good practice significantly.

While we tend to think that only our company has problems, actually it is often not the case. There are many problems and issues that are common to other companies and industries. The Board of Directors is in a good position to recognize the issues of the Company from a broader and more comprehensive perspective and discuss them openly.

The members of the Board have diverse backgrounds, including those with corporate management experiences, academic experts, and two non-Japanese. Being able to have proper discussions among these diverse members bolster its supervision of global businesses. I believe such operation of the Board should remain unchanged.

Q2 : You mentioned common problems in the world and the current issue of Covid-19 pandemic should be exactly one of them. The Group is being significantly affected by it and uncertainties in the business environment are expected to persist for some time to come. How does the Board of Directors view the current situation and challenges the Group is facing now?

A2 : Of course, the impact of the pandemic on our business cannot be ignored, and it is imperative for us to take countermeasures to address the current situation, such as ensuring the safety and health of our people by putting infection prevention measures in place and quick recovery of business performance.

However, paying attention only to short-term responses is not sufficient. In the construction and automobile industries, the main business areas of the Group, demand had been showing downward trends even before the pandemic. The Board of Directors should always keep an eye on such signs of changes in the business environment and their effects on the essential business structure of the Group. By discussing them comprehensively, it can supervise the executives to recognize issues and take appropriate steps to reform the Group towards the right direction.

Q3 : Please tell us how the Board of Directors intends to improve the effectiveness of the Group's corporate governance.

A3 : I think there are two important pillars of corporate governance. The first pillar is internal control of the executive branch led by the CEO. We are a global company with operations all over the world. It is important for us to unite people with diverse cultures, languages, ways of thinking and ways of working through communication. In other words, whether opinions and information from employees in the frontline

of the business are being communicated well to the top; whether the ideas of the top are being properly cascaded down and permeated to the employees; and whether necessary discussions are being held between them. I believe it is essential that the Group maintain functioning organizations and systems to ensure vigorous communications.

Complementing this is the second pillar, where the Board as well as the Nomination, Audit and Compensation Committees, led by Independent External Directors, manage and supervise whether the internal control system is properly operated and functioning.

When it comes to corporate governance, people tend to focus on creating a "formal structure" like the second pillar, but without a robust first pillar of internal control, the effectiveness of the Board would not improve.

At our Group, I think that the first and the second pillars are well-balanced. The organization of the Board of Directors and each Committee is solid, and there are no factors that hinder free exchange of opinions and discussions. Therefore, I think the supervisory system is well established. More than 10 years have passed since the acquisition of Pilkington, and the internal control system for execution has improved not only in structure but also in effectiveness. However, I believe there is still room for improvement and efforts are needed. On a day-to-day business, it is necessary for the Group to make efforts to shorten the distance between the top management and employees in the frontline of the business. It should be the role of the Board of Directors to keep bringing up the areas for improvement and monitoring them.

Q4 : Medium-term Plan (MTP) Phase 2 ended in the fiscal year ending March 2020. In the final year, the financial targets were not achieved due to the deterioration of the market environment, as well as the spread of the new coronavirus infection. How does the Board of Directors evaluate and summarize MTP Phase 2?

A4 : In an era of such drastic changes in the environment, I think it is difficult for a company to accurately forecast the business environment for three years and make a plan with set numerical targets. It is very disappointing and regrettable that our MTP Phase 2 failed to reach the financial targets, but we must not evaluate that what we did was wrong or that everything went wrong.

The most important factor in evaluating MTP Phase 2 is how much structural reform actions were taken over the three years. From that point of view, it should be evaluated that the efforts to achieve the plan should be recognized, but the level of achievements did not reach what had been expected by the Board and further improvement efforts are required.

Because of its business structure, the Group is easily affected by changes in the demands in the construction and automobile industries. We are still addressing the issue of reforming the business structure, including how to approach it. In implementing structural reforms, while it is important to work on growth areas, including the development of new businesses, it is the most critical for the Group to keep making patient efforts in order to produce positive results in the existing main business areas. I think we should incorporate a reform plan to solve such issues as the basis of the next medium-term management plan.



Q5 : Lastly, please tell us your thoughts on the direction the Group should aim for in the future.

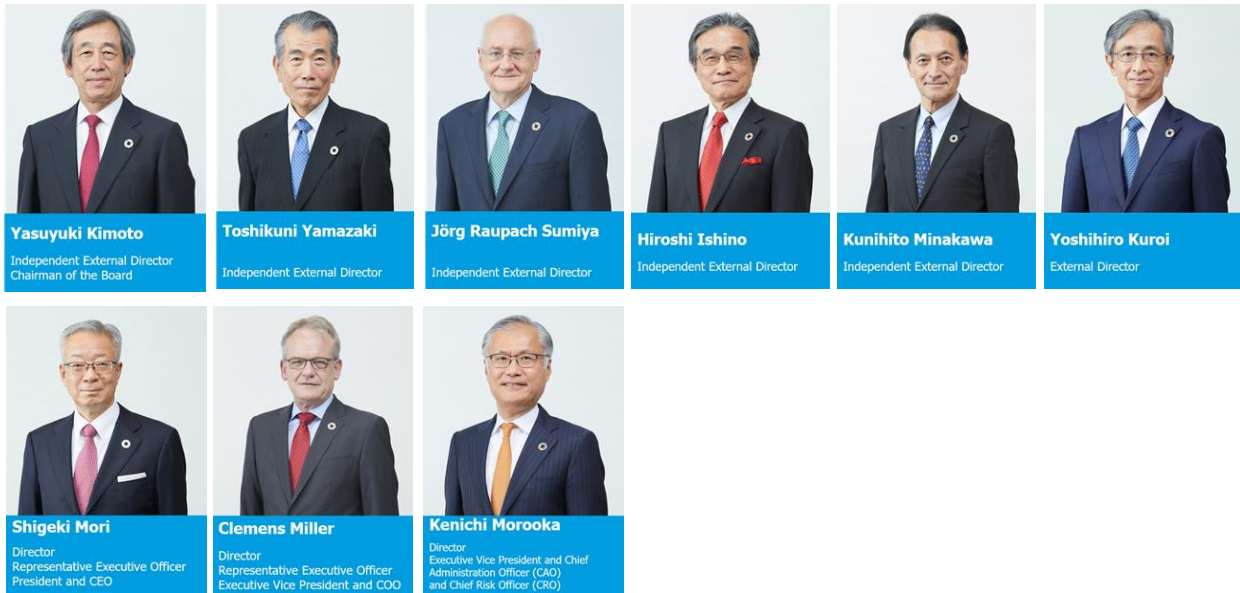
A5 : Glass will continue to be needed in the world and therefore, its markets will not suddenly disappear. With sensible corporate strategy, there should be ways to sustain the business.

However, we should not only be just seeking to survive as a conventional material supplier but also develop new applications and markets for the material. The inorganic material has diverse functionality such as controlling light and heat, conductive with coating and recyclable and has potential applications in information technology, medical, environmental and other fields.

As I said earlier, against the backdrop of pandemic, the first priority is to take counteractions immediately and improve business performance but the new medium-term management plan should incorporate

essential structural reforms, particularly in the main business fields as well as a new growth strategy based on the technologies related to the wonderful material, glass. The Board of Directors will also actively work to achieve sustainable growth and increase corporate value of the Group through discussions with the executives.

Board of Directors (As of 16 July 2020)



Nomination Committee	Audit Committee	Compensation Committee
Yasuyuki Kimoto (Chairman of Nomination Committee)	Toshikuni Yamazaki (Chairman of Audit Committee)	Jörg Raupach Sumiya (Chairman of Compensation Committee)
Toshikuni Yamazaki	Yasuyuki Kimoto	Toshikuni Yamazaki
Jörg Raupach Sumiya	Jörg Raupach Sumiya	Yasuyuki Kimoto
Hiroshi Ishino	Hiroshi Ishino	Hiroshi Ishino
Kunihito Minakawa	Kunihito Minakawa	Kunihito Minakawa
Shigeki Mori		Shigeki Mori

Biographies of Directors

Shigeki Mori

Shigeki Mori was appointed Representative Executive Officer, President and CEO in April 2015 and joined the Board of Directors in June 2015.

Shigeki joined NSG in 1981 and worked in functions of HR and corporate planning. In 1997 he was appointed the President of NSG Spacia Co., Ltd. He held a succession of posts in Architectural Glass Division, including General Manager of Functional Glass Production & Technology and President of NSG Kanto Co., Ltd., then Head of Functional Glass Dept. in Building Products Division and the President of NSG Building Products Co., Ltd.

For two years from July 2010 he was based in UK as the Head of Production, Fabrication and Marketing, UK and South Europe, Architectural Glass.

In May 2012 he was appointed Senior Corporate Officer, Head of Architectural Glass Japan and in June 2012 appointed Senior Corporate Officer, Head of Technical Glass SBU (current position).

He graduated with a BA in Laws from Kobe University in 1981. Shigeki Mori is married, with two children.



Clemens Miller

Clemens Miller was appointed Representative Executive Officer, Executive Vice President and COO in April 2012.

Clemens joined the Engineering Department of the German subsidiary of Pilkington plc in 1992 after having worked six years in the steel industry. He had a number of operational, functional and general management roles in the Pilkington Building Products business line, working in Germany, the UK, Poland and Italy. In 2007 he was appointed Managing Director Building Products Europe and in 2010 Vice President Commercial & Solar Energy Products. He was appointed President, Building Products Worldwide and joined the Board of Directors in June 2011.

Clemens Miller was appointed Head of the Architectural Glass and Technical Glass Strategic Business Units in February 2012 and retains those responsibilities in addition to those of COO.

Clemens studied Mechanical Engineering in Aachen (Germany) and Lyon (France) and graduated with a Dr.-Ing. in Metallurgy at RWTH Aachen in 1986. He subsequently attended the Advanced Management Program at INSEAD. A German citizen, Clemens Miller is married with four children.



Kenichi Morooka

Kenichi Morooka was appointed Representative Executive Officer, Executive Vice President and CFO in April 2016.

Kenichi joined The Sumitomo Bank, Limited (Currently Sumitomo Mitsui Banking Corporation) in 1979 and was appointed Senior Assistant General Manager, International Affairs (Tokyo) in April 1993. Kenichi was appointed President, SMBC Securities, Inc. (NY), and Vice President, SMBC Capital Markets, Inc. (NY) in June 2002.

Kenichi joined NSG in December 2006. After having worked on acquisition projects in London, he was appointed a Corporate Officer, Head of Financial Planning in June 2008. In June 2011, he became a Senior Corporate Officer, CFO Technical Glass, General Manager of Technical Glass Administration, and the Head of Corporation Planning and Communication.

Kenichi has also held a number of managerial positions in the finance and treasury functions in the UK and Japan.

Kenichi was appointed Senior Corporate Officer, Deputy CFO of the NSG Group in May 2012, became an Executive Officer, Deputy CFO in April 2013, and an Executive Officer, Executive Vice President in June 2013.

Kenichi graduated with a BA in Economics from Kyoto University in 1979 and subsequently obtained a MA in Economics from Churchill College, University of Cambridge in 1988. A Japanese citizen, Kenichi Morooka is married.



Yasuyuki Kimoto

Yasuyuki Kimoto

Mr. Yasuyuki Kimoto has been elected as an External Director of the Company since June 2016. In addition to his experience of having led an independent-majority board of a major international manufacturing company in his role as chair of the board, in relation to a certain UK subsidiary of a major Japanese financial institution he also had the career and experiences of having led its board in his capacity as then president and chair, comprising a plural number of non-Japanese independent directors as its members. It is expected that he should continue to contribute to the supervisory function of the Board including in overseeing performance of Executive Officers from an independent and objective standpoint as well as based upon his abundant international experiences and broad knowledge and perspectives with regard to business management.



April 1971	Joined the Sumitomo Bank, Limited (Currently Sumitomo Mitsui Banking Corporation)
June 1998	Director, The Sumitomo Bank, Limited
June 1999	Director, Executive Officer, The Sumitomo Bank, Limited
June 2002	Director, Managing Executive Officer, Sumitomo Mitsui Banking Corporation
April 2004	Managing Director and Managing Executive Officer, Sumitomo Mitsui Banking Corporation
June 2005	Senior Managing Director and Senior Managing Executive Officer, Sumitomo Mitsui Banking Corporation (Retired in April 2006)
May 2006	President and CEO, The Japan Research Institute, Limited
April 2012	Special Adviser, The Japan Research Institute, Limited (Retired in February 2019) Chairman of the Board of Director, Olympus Corporation (Retired in June 2015)

June 2015	Corporate Auditor, DMG Mori Co., Ltd. (Retired in March 2019)
June 2016	Director, NSG Group (Incumbent)

Toshikuni Yamazaki

Mr. Toshikuni Yamazaki's career and experience include serving as Representative Director, Executive Vice President (in charge of finance, investor relations and accounting) and full-time corporate auditor of a major international manufacturing company, and a member of the Investment Advisory Committee of the Government Pension Investment Fund, Japan (GPIF). He has vast experience as well as a broad understanding of business management and finance and accounting.



April 1968	Joined Nippon Kokan K.K. (Currently JFE Holdings, Inc.)
June 1999	Director, Nippon Kokan K.K.
April 2000	Vice President (Corporate Officer), Nippon Kokan K.K.
April 2001	Senior Vice President (Corporate Officer), Nippon Kokan K. K
April 2005	Corporate Officer, Executive Vice President, JFE Holdings, Inc. (Retired in March 2009)
June 2005	Representative Director, JFE Holdings, Inc
April 2009	Director, JFE Holdings, Inc
June 2009	Corporate Auditor (Full-time), JFE Holdings, Inc. (Retired in June 2013) Corporate Auditor, Universal Shipbuilding Corporation (Retired in December 2012)
April 2010	Corporate Auditor, JFE Engineering Corporation (Retired in April 2013) A member of Investment Advisory Committee, Government Pension Investment Fund, Japan (GPIF) (Retired in March 2013)
March 2015	Representative Director and President, Ryugasaki Country Club (Incumbent)
June 2015	Director, NSG Group (Incumbent)

Jörg Raupach Sumiya

Dr. Jörg Raupach Sumiya has been elected as an External Director of the Company since June 2019. He has international experience in the field of both business and academia, and is currently a professor at the college of business administration, Ritsumeikan University, one of the Japan's famous private university. It is expected that he should continue contribute to the supervisory function of the Board including in overseeing performance of Executive Officers from an independent and objective standpoint as well as based upon his abundant experiences and broad knowledge and perspectives with regard to an academic expert and business management.

* Note: Dr. Jörg Raupach Sumiya was newly appointed as Director at the 153rd Ordinary General Meeting of Shareholders held on 27 June 2019 therefore it shows the total number of the Board of Directors meetings held and attended after his assumption.



June 1990	Senior Consultant, Roland Berger Strategy Consultants
Oct 1995	Senior Executive Managing Director, Trumpf Corporation
July 1999	Research Fellow, German Institute for Japanese Studies
June 2001	General Manager, Administration, NEC Schott Components Corporation (Currently Schott Japan Corporation)
Dec 2002	President, Representative Director, NEC Schott Components Corporation (Currently Schott Japan Corporation)
June 2011	Manager, Innovation, Schott Electronic Packaging GmbH
Sept 2011	Professor, FOM University (Germany)
April 2012	Professor, College of Business Administration Ritsumeikan University (Incumbent)
June 2019	Director, NSG Group (Incumbent)

Hiroshi Ishino

Mr. Hiroshi Ishino was in charge of overseas operations at a major trading company, and since then has been promoting the Group's global strategy as president and CEO of a major international manufacturer. It is expected that he will contribute to the supervisory function of the Board including in overseeing performance of Executive Officers from an independent and objective standpoint as well as based upon his abundant experiences and broad knowledge and perspectives with regard to business management.



April 1975	Joined Mitsubishi Corporation
March 2003	Joined Kansai paint Co., Ltd.
June 2006	Director, Deputy General Manager, International Affairs, Kansai paint Co., Ltd.
June 2008	Managing Director, Sales, Coatings Business, Kansai paint Co., Ltd.
April 2010	Senior Managing Director, Sales, Kansai paint Co., Ltd.

June 2011	Director, Senior Managing Executive Officer, Sales, International Affairs and Procurement, Kansai paint Co., Ltd.
June 2012	Representative Director, Senior Managing Executive Office, Sales, International Affairs and Procurement, Kansai paint Co., Ltd.
April 2013	Representative Director and President, Kansai paint Co., Ltd.
June 2019	Senior Corporate Advisor, Kansai paint Co., Ltd. (Incumbent)

Kunihito Minakawa

Mr. Kunihito Minakawa has been a Managing Executive Officer and an Audit & Supervisory Board Member at a major international manufacturer, and has global experience, a wide range of insights and practical experience in finance and auditing. It is expected that he will contribute to the supervisory function of the Board including in overseeing performance of Executive Officers from an independent and objective standpoint as well as based upon his abundant experiences and broad knowledge and perspectives with regard to business management and finance and accounting.



April 1978	Joined RICOH CO., LTD.
October 1997	JSVP and CFO, Ricoh Americas Corporation
June 2008	Business Planning Manager and Business Management Manager, Business Management Centre, Overseas Division, RICOH CO., LTD.
April 2010	Corporate Vice President and General Manager, Finance and Accounting, RICOH CO., LTD.
April 2012	Corporate Senior Vice President and General Manager, Finance and Accounting, RICOH CO., LTD.
June 2013	Corporate Auditor (Full-time), RICOH CO., LTD.
June 2017	External Director, Sony Corporation (Scheduled to retire in June 2020)
June 2018	External Director, Santen Pharmaceutical Co., Ltd. (Incumbent)

Yoshihiro Kuroi

Mr. Yoshihiro Kuroi has been a president of an overseas subsidiary at a major trading company, and has a wealth of practical experience in overseas business, IR departments, etc. as an executive officer at a major automobile manufacturer and major automobile parts manufacturer. It is expected that he will contribute to the supervisory function of the Board including in overseeing performance of Executive Officers from an independent and objective standpoint as well as based upon his abundant experiences and broad knowledge and perspectives with regard to business management.



April 1977	Joined Mitsubishi Corporation
April 1994	Managing Director, MCF Financial Services Limited
June 2004	Seconded to Mitsubishi Motors Corporation CSR Promotion Office to rescue the Company
January 2007	General Manager, Investor Relations, Mitsubishi Corporation
April 2010	Senior Vice President, Mitsubishi Corporation
July 2010	Executive Officer, Corporate Planning Office, Mitsubishi Motors Corporation
June 2016	Senior Vice President, Mitsubishi Motors Corporation
April 2018	Senior Managing Executive Officer, Kasai Kogyo Co., Ltd
May 2020	Advisor, Japan Industrial Solutions Co., Ltd. (Incumbent)

Corporate Governance

Approach

Nippon Sheet Glass Group (the "NSG Group" and the "Group") believes that achieving and maintaining an advanced level of corporate governance is a key management agenda. We have created and adopted "[NSG Group Corporate Governance Guidelines](#)", supporting and endorsing the spirits and principles of Corporate Governance Code provided by Tokyo Stock Exchanges.

These Guidelines are intended to define and embed the basic principles and framework of our corporate governance in the organization. To further secure such purposes the Group has also adopted a self-disciplinary approach for the Guidelines which, among others, requires it to give a reasonable account to our shareholders if the Group should proceed with any actions deviating from these Guidelines.

The Group considers achievement of an advanced level of corporate governance a key management objective and will implement the following.

(1) Organizational structure

- a. The Group's ultimate parent company, Nippon Sheet Glass Company, Limited will adopt a Company with Three-Committee structure and the Company hence will establish and maintain the Board of Directors (the "Board"), the Nomination Committee, the Audit Committee, the Compensation Committee (individually referred to as the "Committee") and office of Executive Officers.
- b. The Board will authorize the Executive Officers to make decisions on the execution of businesses for the Company within the scope as permitted by law, thereby facilitating separation between business execution and oversight, enhancing the transparency of the management processes and strengthening the Board supervisory function over the executive management.
- c. The Company will establish and maintain an internal control system operating on a Group-wide basis including in relation to financial reporting (J-SOX).

(2) Stakeholders Communication

- a. The Group aims to be judged by as best in class by our many stakeholder groups in a variety of settings across the whole group (including shareholders, customers, suppliers and local communities) from their own perspectives and also will develop, maintain and enhance good relationship with any of such groups.
- b. In relation to the matter of disclosure of corporate information whether or not it is to be made according to legal requirements, the Group always aims to act in a timely and appropriate manner both in terms of the substance and form, with a view to maintaining and invariably enhancing transparency of management of the Group.

(3) Code of Conduct

- The Group will, in order to materialize those values, create the NSG Group Code of Ethics which all entities and employees etc. of the Group must comply with and will be regularly reviewed in light of the status of implementation/embedding within the Group and the contents.

Basic Approach

Corporate Governance Structure

NSG Group adopts "Company with Three Committees" governance structure, and has in place, as statutory corporate organizations, Board of Directors and —Nomination Audit and Compensation Committees, and an office of Executive Officer. Currently, the Chairman of the Board as well as chairpersons of all three Committee are all appointed from among the Independent External Directors.

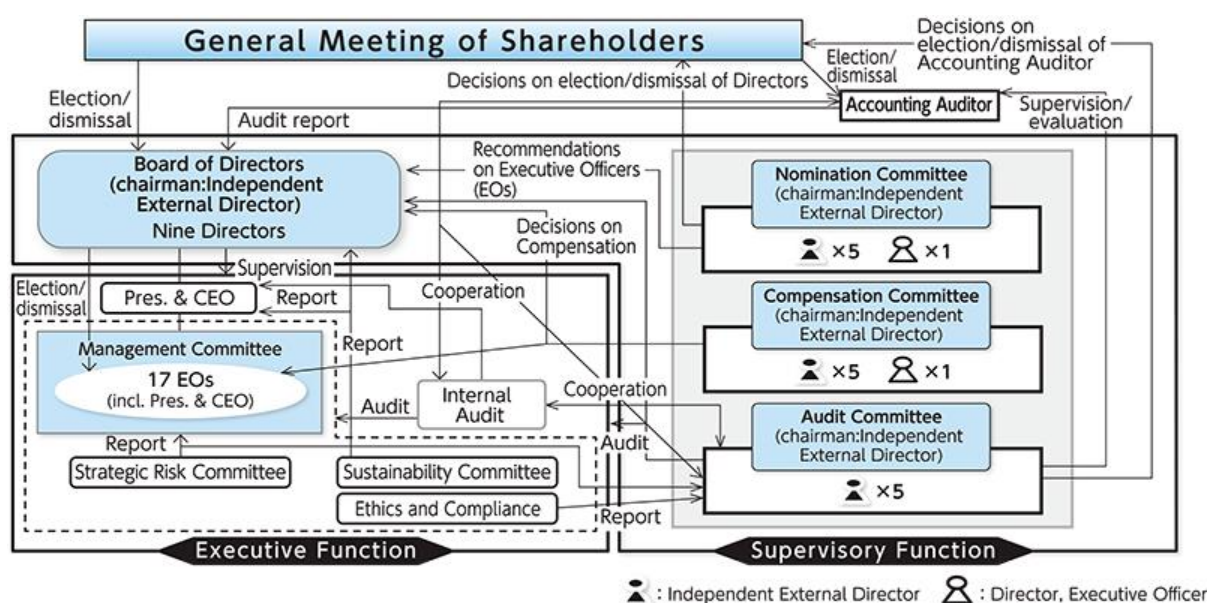
Various steps have been taken to date so that NSG Group has enhanced management transparency by further separation of functions between business execution and its supervision and strengthened role of independent external directors. For example, according to the NSG Group Corporate Governance Guidelines, the roles of Chairman of the Board and CEO are clearly distinguished. In the event that Chairman of the Board is not an Independent External Director, a Lead Director whose role is to advise Chairman of the Board on matters concerning corporate governance shall be appointed from among Independent External Directors. Independent External Directors meet on an as-needed basis, even without presence of executives, for discussion concerning matters such as corporate governance and businesses.

As regards executive function, the Group also has Management Committee, Sustainability Committee, and Strategic Risk Committee. Currently, seventeen (17) Executive Officers are responsible for the business execution. Three (3) of them are Representative Executive Officers performing the duties of CEO, COO and CAO respectively.

Overview of Corporate Governance Structure (As of 16 July 2020)

Key items		Description
Type of Governance structure		Company with Three Committees
Number of Directors / term of office		9(6) / 1 year
Number of Independent External Directors		5
Chair of the Board		Mr. Yasuyuki Kimoto (Independent External Director)
Chair of Three Committees		Nomination: Mr. Yasuyuki Kimoto (Independent External Director), Audit: Mr. Toshikuni Yamazaki (Independent External Director), Compensation: Dr. Jörg Raupach Sumiya (Independent External Director)
Number of Executive Officers (Representative Executive Officers) / term of office		17 (3) / 1 year
Compensation system	Executive Officer (including those who concurrently serve as Directors)	(1) Basic salary (2) Performance-related incentive scheme i. Management Incentive Plan (annual bonus) ii. Long Term Incentive Plan
	External Director	The level of compensation adequate for his/her duties
Accounting Auditor		Ernst & Young ShinNihon LLC

Corporate governance mechanism (As of 16 July 2020)



Supervisory Function

Diverse and highly independent in its structure, the Board of Directors is responsible for making decisions on the Group's material matters and supervising the execution of business.

[Board of Directors]

Role	Board of Directors is responsible for making decisions on the Group's material matters such as basic policies for business management, internal control system and duty allocation among Executive Officers, and supervision over business execution by executives.
Composition	<ul style="list-style-type: none"> 5 Independent External Directors, 1 External Director and 3 Directors who concurrently serve as Executive officers Chaired by Mr. Yasuyuki Kimoto, Independent External Director
Number of times met in FY2020	10
Secretariat	Legal & Administration Department

Composition of Nomination Committee, Audit Committee, and Compensation Committee as of 16 July 2020

Name	Position	Nomination Committee	Audit Committee	Compensation Committee
Yasuyuki Kimoto	Independent External Director	◎ (Chair)	○	○
Toshikuni Yamazaki	Independent External Director	○	◎ (Chair)	○
Jörg Raupach Sumiya	Independent External Director	○	○	◎ (Chair)

Hiroshi Ishino	Independent External Director	○	○	○
Kunihito Minakawa	Independent External Director	○	○	○
Shigeki Mori	Director Representative Executive Officer	○	-	○
		(6)	(5)	(6)

[Nomination Committee]

Role	Nomination Committee is responsible for making decisions on the General Meeting of Shareholders agenda items regarding the appointment and removal of Directors. It also oversees the succession plans for key executives, including President and CEO, and provides advice and recommendations for the Executive Officer candidates.
Composition	<ul style="list-style-type: none"> • 5 Independent External Directors and 1 Internal Director • Chaired by Mr. Yasuyuki Kimoto, Independent External Director
Number of times met in FY2020	6
Secretariat	Human Resources Department
Legal adviser	Legal & Administration Department

[Audit Committee]

Role	Audit Committee is responsible for auditing the execution of duties by Directors and Executive Officers, preparing audit reports, and deciding details of proposals concerning appointment, removal or not reappointing the Accounting Auditor.
Composition	<ul style="list-style-type: none"> • 5 Independent External Directors • Chaired by Mr. Toshikuni Yamazaki, Independent External Director • Having served as Representative Director and Executive Vice President for finance, investor relations and accounting of JFE Holdings, Inc., Mr. Toshikuni Yamazaki has considerable management experience and broad knowledge of finance and accounting. Having served as Corporate Senior Vice President and General Manager, Finance and Accounting, Corporate Auditor of RICOH CO., LTD., Mr. Minakawa has considerable management experience and broad knowledge of finance and accounting.
Number of times met in FY2020	11
Secretariat and how to ensure its independence	<ul style="list-style-type: none"> • Audit Committee Office • Any personnel affairs relating to staff of Audit Committee Office require a prior notice to Audit Committee and its consent. • The head of Audit Committee Office shall not concurrently hold any position that may be involved in the execution of businesses and affairs of the Group, and shall report only to Audit Committee.
Audit methodology and cooperation with others	<ul style="list-style-type: none"> • Audit by Audit Committee is such that it interviews executives, attends material executive meetings such as Management Committee, and inspects business operations and financial

status of the company and major subsidiaries, being assisted by Audit Committee Office, in accordance with its audit policy and plans, as well as periodically monitors and reviews status of development and operation of the Group's internal control system.

- Audit Committee meets with Accounting Auditor and internal audit function on a regular and as needed basis to receive reports on such as progress of audits, exchange views and gather information.

[Compensation Committee]

Role	Compensation Committee is responsible for making decisions on a compensation policy for Directors and Executive officers as well as individual elements of compensation for Directors and Executive Officers.
Composition	<ul style="list-style-type: none"> • 5 Independent External Directors and 1 Internal Director • Chaired by Dr. Jörg Raupach Sumiya, Independent External Director
Number of times met in FY2020	4
Secretariat	Human Resources Department
Legal adviser	Legal & Administration Department

Board Effectiveness Evaluation

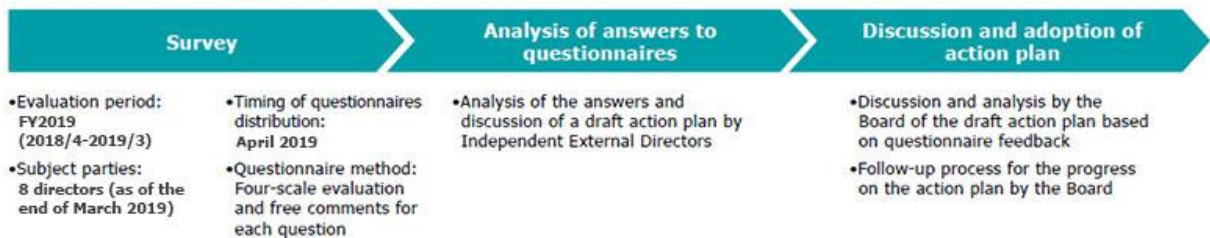
NSG Group started an annual evaluation process for the Board effectiveness since FY2016, in order to further and constantly improve performance and effectiveness of the Board of Directors and Nomination, Audit and Compensation Committees.

For FY2019

• Evaluation process

The effectiveness review of the Board and the Committees was conducted with reference to feedbacks and views taken from each Director in terms of composition, status of management, agenda setting and direction in the role of such organization, led and supervised by the Independent Directors (the leader is Chairman of the Board) to ensure its adequacy and independence.

■ Overview of evaluation and analysis process



• Summary results of evaluation, and Action plan

The effectiveness review endorsed that the Board and the Committees were all properly and soundly operated to ensure their effectiveness. Specific recommendations and inputs were given through the process, however, regarding the following points, based on which the Board developed the action plan:

- Extensive and focused discussion on significant management agendas (e.g. growth strategy, financial strategy, HR strategy and ESG strategy) in the course of development and preparation for the next medium-to-long term management plan.

- Consequently, presentation of the roadmap to attain sustainability across the Group as well as enhancement of the corporate value in the medium- to long- term in the next medium-to-long term management plan.
- Deeper understanding of the Executive team by the Board in light of its resources, composition, expertise and capability and reinforcement of the oversight and leadership by the Board to further enhance their performance (increased opportunities of exposure of the Executive Officers and next generation candidates for senior management lined up in the pipeline to the Board and the number and enhanced level of their communications with Directors).
- Initiatives to ensure diversity and their support (pursuit of further international experiences and gender diversity, especially election of a female director).
- Creation of more robust plan on succession for CEO and other senior managing officers including by reference to diversification aspects.
- Persistent and secured follow-up by the Executive teams to implement/deliver key resolutions and challenges.

For details, please see [the following](#).

However, the effectiveness review has been suspended concerning the discussion on the New Mid-term Plan to be commenced in FY2021 due to the repercussions of the worldwide pandemic of COVID-19. The Board plans to have thorough discussion on the next MTP when we can figure out a more clear-cut business outlook.

Executive Function

Seventeen Executive Officers (as of 16 July 2020), a professional group furnished with diverse backgrounds, are responsible for the business execution of NSG Group

【Executive Officer】

Role	Business execution of NSG Group
Composition	3 Representative Executive Officers (Chief Executive Officer (CEO), Chief Operation Officer (COO) and Chief Administration Officer (CAO), respectively) and 14 Executive Officers

【Management Committee】

Role	Management Committee leads the Group's business operation and oversees the implementation status of businesses in order to realize the policies and targets set forth by the Board of Directors efficiently and appropriately.
Composition	Management Committee mainly consists of the Executive Officers.
Number of times met in FY2020	11

【Sustainability Committee】

Role	Sustainability Committee builds the sustainability strategies, presides over all of the Group's sustainability related activities, and ensures effective communication with various stakeholders.
Composition	Group Sustainability Committee is chaired by CEO or a person who is nominated by CEO and composed of CEO, COO, CAO, CFO, Group Sustainability Director, the Heads of each Strategic Business Unit, Chief Development Officer (CDO), Chief Human Resources Officer (CHRO), Chief Legal Officer (CLO), Chief Corporate Planning Officer (CCPO), Chief Communication Officer (CCO) and the Heads of relevant Group Functions.
Number of times met in FY2020	2

【Strategic Risk Committee】

Role	Strategic Risk Committee periodically reviews policies, strategies and frameworks concerning risk management throughout the Group, and appropriately take into account the results of such review in forming the organization strategy and goals, in order to promote efficiency of the Group's business management.
Composition	Strategic Risk Committee is chaired by CEO or a person who is nominated by CEO and composed of CEO, COO, CAO and Chief Risk Officer (CRO), CFO, the Heads of each Group Function, and the Heads of each Strategic Business Unit.
Number of times met in FY2020	3

External Director

Criteria of Independency for External Director at NSG

An External Director is a director who has never been a director, executive officer nor employee of the company nor its subsidiary.

To enhance the transparency of business management, the Company has appointed six External Directors out of the nine Directors, five of whom are designated as Independent Directors under the TSE.

In addition to the criteria for independency defined by the TSE, the Company has established its own criteria of independency for External Directors, taking into consideration their relationship with the Group including such with its officers and major shareholders. All of the five External Directors satisfy the criteria of independency., its officers, major shareholders, etc. These all five External Directors meet the relevant criteria of independency.

Please refer to [the Group's Criteria of independency for External Ddirectors](#).

Background, concurrent offices and activities of External Directors

Mr. Yasuyuki Kimoto * Independent External Director	<p>Background</p> <p>Mr. Kimoto has a career and experience leading in his capacity as then president, director and chairman of the Board of a UK subsidiary of Sumitomo Mitsui Banking Corporation along with his experience serving as chairman and director and thus leading the Board of Olympus Corporation whose majority consisted of independent external directors. He has abundant international experience and broad knowledge and perspectives with regard to business management.</p> <p>Activities</p> <p>Mr. Kimoto attended all of the ten (10) meetings of Board of Directors held in the fiscal year ended March 2020, all of the six (6) meetings of the Nomination Committee, all of the eleven (11) meetings of the Audit Committee and all of the four (4) meetings of the Compensation Committee, and made remarks mainly from the perspective of experienced business management, as necessary.</p>
Mr. Toshikuni Yamazaki * Independent External Director	<p>Background</p> <p>Mr. Yamazaki has a career and experience serving as Representative Director, Executive Vice President (in charge of finance, investor relations and accounting) of JFE Holdings, Inc., and as a member of the Investment Advisory Committee of the Government Pension Investment Fund, Japan (GPIF). He has abundant experience, broad knowledge and perspectives regarding business management, in addition to a substantial degree of insight relating to finance and accounting.</p> <p>Concurrent offices</p>

	<p>Representative Director and President, Ryugasaki Country Club</p> <p>Activities Mr. Yamazaki attended all of the ten (10) meetings of Board of Directors held in the fiscal year ended March 2020, all of the six (6) meetings of the Nomination Committee, all of the eleven (11) meetings of the Audit Committee and all of the four (4) meetings of the Compensation Committee, and made remarks mainly from the perspective of experienced business management, as necessary.</p>
<p>Dr. Jörg Raupach Sumiya ※Independent External Director</p>	<p>Background Dr. Jörg Raupach Sumiya has international experience in the field of both business and academia, and is currently a professor at the college of business administration, Ritsumeikan University, one of the Japan's famous private university. He has abundant experience and broad knowledge and perspectives with regard to an academic expert and business management.</p> <p>Concurrent offices Professor at the college of business administration, Ritsumeikan University.</p> <p>Activities Attended all 8 Board of Directors meetings, all 3 Compensation Committee meetings held after his assumption of the office of Director on 27 June 2019 during the fiscal year ended March 2020, and all three Audit Committee meetings held after his assumption of the member of the Audit Committee on 1 January 2020 during the fiscal year ended March 2020 under review, and made necessary contribution to the deliberation mainly from a specialized viewpoint of an experienced academic expert and business manager.</p>
<p>Mr. Hiroshi Ishino * Independent External Director</p>	<p>Background Mr. Hiroshi Ishino was in charge of overseas operations at Mitsubishi Corporation, and since then has been promoting the Group's global strategy as president and CEO of Kansai paint Co., Ltd. He has abundant experience and broad knowledge and perspectives with regard to business management.</p> <p>Concurrent offices Senior Corporate Advisor, Kansai paint Co., Ltd.</p> <p>Activities It was newly appointed at the Ordinary General Meeting of Shareholders held on July 16, 2020.</p>
<p>Mr. Kunihito Minakawa * Independent External Director</p>	<p>Background Mr. Kunihito Minakawa has been a Managing Executive Officer and an Audit & Supervisory Board Member at RICOH CO., LTD., and has global experience, a wide range of insights and practical experience in finance and auditing. He has abundant experience and broad knowledge and perspectives with regard to business management and finance and accounting.</p> <p>Concurrent offices External Director, Santen Pharmaceutical Co., Ltd.</p> <p>Activities It was newly appointed at the Ordinary General Meeting of Shareholders held on July 16, 2020.</p>
<p>Mr. Yoshihiro Kuroi</p>	<p>Background Mr. Yoshihiro Kuroi has been a president of an overseas subsidiary at Mitsubishi Corporation, and has a wealth of practical experience in overseas business, IR departments, etc. as an</p>

executive officer at Mitsubishi Motors Corporation and Kasai Kogyo Co., Ltd. He has abundant experience and broad knowledge and perspectives with regard to business management.

Concurrent offices

Advisor, Japan Industrial Solutions Co., Ltd.

Activities

It was newly appointed at the Ordinary General Meeting of Shareholders held on July 16, 2020.

Our actions to date aiming for an advanced level of corporate governance

2008	<ul style="list-style-type: none"> • Changed the company's fundamental governance structure from the traditional Statutory Auditor system to the current three-Committee structure • Four Independent External Directors were elected accordingly
2010	<ul style="list-style-type: none"> • Created and adopted our original and stringent criteria for the independency of External Director, taking into account not only the standard of Tokyo Stock Exchanges but also those similar rules in other major jurisdictions
2012	<ul style="list-style-type: none"> • All three (Nomination, Audit and Compensation) Committees became to be chaired by Independent External Directors respectively
2013	<ul style="list-style-type: none"> • Board of Directors became to be chaired by an Independent External Director
2014	<ul style="list-style-type: none"> • Made the independency criteria for External Directors more specific and publicly disclosed it • Incorporated the share purchase element into Long Term Incentive Plan • Set shareholding targets of Executive Officers
2015	<ul style="list-style-type: none"> • Established NSG Group Corporate Governance Guidelines
2016	<ul style="list-style-type: none"> • Started annual board effectiveness evaluation process
2018	<ul style="list-style-type: none"> • Revised the "NSG Group Corporate Governance Guidelines" (December 2018) in response to the June 2018 revision of the Corporate Governance Code.
2019	<ul style="list-style-type: none"> • Of the eight members of the Board of Directors, the majority of the Independent External Directors were five (5)

Corporate Governance Report

The Group has filed the Corporate Governance Report in accordance with the TSE Corporate Governance Code revised in June 2018.

Please refer to [the Group's Corporate Governance Report \(as of 19 August 2020\)](#).

Disclosure based on the principles of the Corporate Governance Code

- Principle 1.4 : [Cross-Shareholdings](#)
- Principle 1.7 : [Related Party Transactions](#)
- Principle 2.6 : Roles of Corporate Pension Funds as Asset Owners
- Principle 3.1 : Full Disclosure

(i) Business principles, business strategies and business plan

- [NSG Group management principles "Our Vision"](#)
 - [NSG Group Long-term Strategic Visions and Medium-term Plan](#)
- (ii) [Basic views and guidelines on corporate governance \(NSG Group Corporate Governance Guidelines\)](#)
- (iii) [Policies and procedures in determining the compensation for the senior management and Directors](#)
- (iv)(v) [Policies and procedures in appointment and dismissal of the senior management and the nomination of the Director candidates](#)
- Supplementary Principle 4.1.1 : [A brief summary of the scope of authority delegated to the management](#)
 - Supplementary Principle 4.1.3 : [Roles and Responsibilities of the Board\(1\) CEO's succession plan](#)
 - Supplementary Principle 4.2.1 : [Roles and Responsibilities of the Board\(2\) Determination of the executive remuneration system and the remuneration amounts](#)
 - Supplementary Principle 4.3.2 : [Roles and Responsibilities of the Board\(3\) Appointment of CEO](#)
 - Supplementary Principle 4.3.3 : [Roles and Responsibilities of the Board\(3\) Dismissal of CEO](#)
 - Principle 4.8 : [Effective Use of Independent Directors](#)
 - Principle 4.9 : [Independence Criteria and Qualification of Independent Directors](#)
 - Supplementary Principle 4.11 : Preconditions for Board and Kansayaku Board Effectiveness
 - Supplementary Principle 4.11.1 : [Views on the appropriate balance of knowledge, experiences and competence of the Board of Directors as a whole, its diversity and appropriate size, and the policy and the procedure for nominating Director candidates](#)
 - Supplementary Principle 4.11.2 : [Concurrent positions held by Directors](#)
 - Supplementary Principle 4.11.3 : [Analysis and evaluation of the Effectiveness of the Board of Directors as a whole, and an outline of the results](#)
 - Supplementary Principle 4.11.3 : [Results of Evaluation of the Effectiveness of the Board of Directors](#)
 - Supplementary Principle 4.14.2 : [The training policy for Directors and etc.](#)
 - Principle 5.1 : [The policy for constructive dialogue with shareholders](#)
 - Principle 5.2 : Establishing and Disclosing Business Strategies and Business Plan

Compensation for Directors and Executive Officers

The Company adopts a company with three committees structure and the Compensation Committee, which holds a majority of Independent External Directors, decides the following matters.

- The policy on compensation and perquisites to be offered to the Directors and Executive Officers of the Company
- Individual compensation and perquisites to be offered to the Directors and Executive Officers of the Company.

Compensation Policy for Executive Officers

NSG Group is a global business, operating in around 30 countries worldwide. The objectives of the compensation policy are to ensure that packages of employment terms and conditions are market competitive and designed in such a way as to attract, retain and motivate Executive Officers of the highest world-class caliber in an international business.

The policy aims to ensure that each individual's basic salary and incentives are aligned with the performance of the Group and the interests of shareholders as well as reflecting the commitment and achievements of the individuals concerned. While some elements of the packages of the Executive Officers may vary depending on the market conditions in the countries in which they are directly employed, annual bonus and long-term incentive plans follow a global policy and are structured, designed and coordinated at the Group level.

Compensation Policy for Independent External Directors

The role of Independent External Directors is to supervise all Group business from their independent and objective standpoint as well as to engage in the material decision-makings as members of the Board of Directors. In order for them to fulfill this role adequately and effectively, and for the Group to retain individuals with the capability and experience required, the appropriate compensation level of Independent External Director is set based on comparisons with other companies using benchmark data provided by external specialists.

Independent External Directors receive compensation for the performance of their duties. They are not eligible for performance-linked bonuses or awards under long-term incentive plans. For details, please see [the following](#).

Policies and procedures in determining the compensation for the senior management and Directors

1. Organization & Responsibilities for determining Compensation

The company has in place the statutory Compensation Committee (the "Committee") as adopting a "Company with Committees" structure. Its current membership consists of the five Independent External Directors of NSG Group and one Director who concurrently serves as Representative Executive Officer, President and CEO. The current chairman is Mr. Yasuyuki Kimoto, an External Director.

No member of the Committee is allowed to be present when matters relating to their specific compensation are being discussed. The Committee is supported by a secretariat from the Human Resources function and may use information from specialist external advisers when necessary. In addition, such member(s) of the Legal and Company Secretarial department based on the terms of reference of Committee acts as in-house legal adviser for any legal aspects or matters.

The Committee has formal authority to determine:

- The policy on individual compensation and other perquisites payable to the Directors and Executive Officers of the Company
- Individual compensation and other perquisites payable to the Directors and Executive Officers of the Company.

The Committee may also give recommendation or advice to the Representative Executive Officer, President and CEO on the policies and details with respect to compensation for the Group's senior management other than Directors and Executive Officers, keeping a consistency with the policy of 3. Below.

2. Activities of the Committee in Compensation related Decision-Making Process

During FY2020, the Committee met on four occasions, and the Committee resolved the individual amount of basic salary, the number of stock options to be allotted, the performance indicators and method for determining the payment amount of incentives (performance-linked compensation), and the actual payment amount based on the achievement against the previous year's indicators. Accordingly, it monitored the progress against the relevant indicators of the running incentives. Attendance rate was 100%, all members attended all Compensation Committee meetings.

3. Compensation Policy for Executive Officers

<A>Basic Policy

NSG Group is a global business, having principal operations in around 30 countries and sales in over 100 countries. The objectives of the compensation policy are to ensure that packages of employment terms and conditions are market competitive and designed in such a way as to attract, retain and motivate Executive Officers of the highest calibre on a worldwide basis in an international business.

Reward Structure and Compensation Composition Ratio

(Reward Structure)

Compensation packages for the Executive Officers principally consist of basic salary, Management incentive Plan (annual bonus) and Long-term incentive plan.

The Group operates a global grading structure across the Group, and management grade is determined based on job evaluation by the Group common scale using the HAY management grade methodology, a globally recognised job evaluation methodology. Management grade determines the maximum quantum levels for participants in both the annual and long-term incentive structures.

Category of compensation	Summary of compensation system
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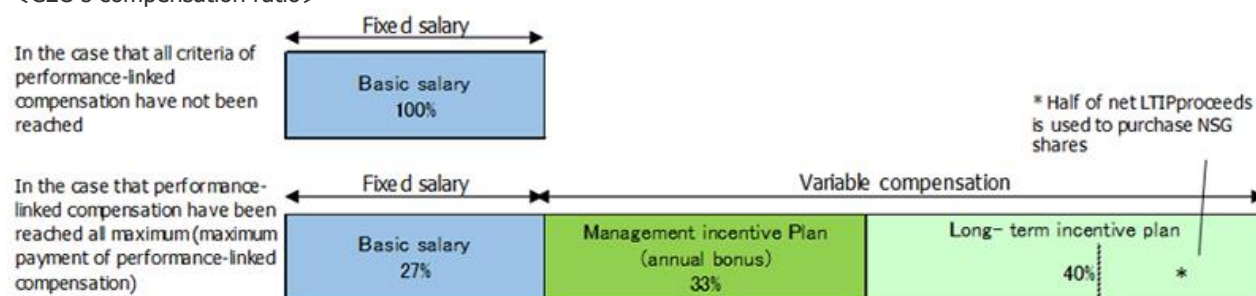
Fixed salary	Basic salary	<ul style="list-style-type: none"> Set a market competitive levels compared to local markets in which the executive is employed.
Performance-related compensation	Management Incentive Plan (annual bonus)	<ul style="list-style-type: none"> Assessed against the achievement of annual performance indicators which are mainly financial. Aligned to NSG Group's Medium-Term Plan Payment levels: Ranging between 0% and 125% against each individual's basic salary dependent upon the management grade
	Long-term incentive plan	<ul style="list-style-type: none"> Assessed against the achievement of long-term performance indicators over a three-year period Issued annually Payment levels: Ranging between 0% and 150% against each individual's basic salary dependent upon the management grade Require the purchase of NSG Shares by using part of the cash award from the plan Shareholding targets set for Executives Plans contain Malus (ability for the value of award to be reduced after it has been granted but before it has vested) and Clawback clauses (ability for the Group to require the participants to repay the value they received after the award has vested)

Note: In addition to the above-mentioned compensation, restricted shares are issued annually to some Executive Officers under Japanese employment terms as a retirement saving plan. Restricted shares have been introduced from the FY2021 in place of stock compensation-type Stock Options which was abolished in the FY2020.

(Compensation ratio)

The ratio of basic salary and incentives is, rather than specifically and equally applied, set according to individuals' management grades.

<CEO's compensation ratio>



Note: For clarification, the above diagram includes only base salary plus annual and Long-term incentive plan compensation, no additional benefits are included. In addition, the impact of the share price movement element of the Long-term incentive plan is not taken into account.

<C> Basic salary

The salaries of Executives are reviewed annually. The policy is to broadly align salaries with market medians for a global business. In determining what are the appropriate market rates, account is taken of turnover, market capitalization and the complexity and breadth of internationalization. In reviewing salaries, account is also taken of the scope and responsibilities of the role, the performance of the individual, the progress the Company is making against its targets and plans and of salary increases planned for other managers.

<D> Management Incentive Plan (annual bonus)

Each Executive Officer participates in an annual performance-related incentive scheme. The Committee establishes the performance criteria and sets the appropriate bonus parameters. The incentive plans are based on challenging financial performance targets relating to the annual budget which is approved by the Board, and the Company ensures that such financial performance targets are clearly aligned to the overall Medium-Term strategy of the Group. The potential payment levels for Executive Officers range between 0 and 125% against each individual's basic salary according to the respective management grade.

In the financial year FY2021 due to the impact of COVID-19 on trading and markets the setting of realistic annual incentive plan targets will be extremely challenging. Like many other organisations NSG has reviewed their approach

for FY21 only, due to the availability of data around which to set stretching targets. For FY21 only the Company will apply an exceptional approach to the annual incentive plan.

At the end of FY2021 a review will be done of a number of key milestones and deliverables and a discretionary decision taken in relation to a payment level. Deliverables will be focused in three main areas, as a number one priority Health and Safety of employees, generation of and management of cash, transition and effectiveness of response to the pandemic and preparation of the business for the future.

This exceptional approach will be taken for one year only due to the unprecedented circumstances.

<E> Long-term incentive

Each Executive Officer may be invited to participate in a Long-Term Incentive Plan (LTIP). These plans are designed to reward the achievement of the Group's longer-term objectives over a three-year period whilst concurrently designed to align the interests of the Executive Officers with those of the shareholders by requiring them to use a part of the proceeds for purchase of NSG shares and thus owning the shares of the Company. An LTIP may be issued annually. Therefore, at any point in time there may be up to three overlapping plans in operation.

i) Performance measures and weight

Plan commencing in FY2018

Measure	Ratio
EPS	100%

Plans commencing in FY2019 and the FY2020

Measure	Ratio
EPS	50%
ROS	50%

ii) Reasons for selected the measures

Measure	Reasons
EPS	The Company commenced the use of two indicators for plans issued from FY2019 onwards. Two performance measures ensure clear link with the Medium-Term Plan, incentivising executives to further strengthen earning power and enhance shareholder value.
ROS	

iii) Determination of LTIP Payment Level

- Payment is calculated by multiplying basic salary for the year the plan started by the total achievement rate calculated, each measure has equal weighting within the plan. Maximum quantum levels are determined by management grade, in the case of the LTIP the range is between 0 and 150% against each individual's basic salary.
- No payment is made if the entry point is not met on the scale.
- "Entry" is set in such a way to ensure that the business is meeting the minimum required performance level and the "Maximum" point on the scale has appropriate stretch. The scales are set and approved by the Committee.
- In order to align Executive Officers with shareholders, the award earned from these plans are factored up or down according to the share price movement during each three-year plan period, and LTIP payment level is adjusted based on the price movement of the monthly average share price in the month before the start of the plan and the monthly average share price of the last month of the plan.

iv) Nature of share-based compensation and Malus & Clawback

- The LTIPs require Executive Officers (including those residing in Japan) and other eligible participants to mandatorily invest 50% of any LTIP proceeds to purchase ordinary NSG shares, a mandatory with-holding operates in order to acquire NSG shares on behalf of the Executive. The mandatory investment leads to further alignment of the Executive Officers with shareholders, allowing Executive Officers to enjoy the benefits of share ownership and continue to be motivated to help build shareholder value.

- To drive share retention and alignment with shareholders, shareholding targets are set for each Executive Officer and are expressed as a percentage of basic salary. Assessment of progress towards the shareholding targets is reviewed annually. The target levels continue to be reviewed by the Compensation Committee in line with market practice, the shareholding targets for Executive Officers are currently between 25 and 100% of basic salary dependent upon the management grade.
- All LTIPs incorporate Malus (ability for the value of the award to be reduced after it has been granted but before it has vested) and Clawback clauses (ability for the Group to require the participant to repay the value they receive after the award has vested). The Group can exercise these provisions if one of a list of trigger events occurs. Trigger events include the Misstatement of results, an error that causes an award to be paid at too high a level, a serious illegal act, or a material breach of the Group Code of Ethics.

4. Compensation Policy for Independent External Directors

Objectives	<ul style="list-style-type: none"> • To ensure that independent external directors can adequately and effectively fulfill their supervisory roles • To ensure that they have the capability and experience required to fulfill this role
Compensation level	<ul style="list-style-type: none"> • Set at the appropriate level based on comparisons with other companies using benchmark data provided by specialist external advisers.*
Compensation Structure	<ul style="list-style-type: none"> • Only Basic salary • Not eligible for Management incentive plans (annual bonuses) and Long-term incentive plans • Independent External Directors receive additional payment if they act as Chair at either the Board or any of the Committees.

* In the case that a Non-Independent External Director is elected, compensation will be set at an adequate level for his/her duties in a way commensurate with the duties discharged by Independent External Directors including in terms of whether or not they are appointed as member of any of three Committees and so forth.

Ethics and Compliance

Transparency In All That We Do

Working ethically and safely is essential for NSG Group to be sustainable.

The Group Ethics and Compliance function supports the Group in achieving its goals by assessing and analyzing ethics and compliance risks and establishing ethics and compliance programs that align with the Group's strategic goals to ensure the success of our business.

In line with these objectives, more specific key performance indicators (KPIs) have been developed to help measure the effectiveness of the ethics and compliance program as shown [here](#).

Code of Ethics and Education

[The NSG Group Code of Ethics](#) broadly covers the ethical behavior expected of our employees in the workplace, including compliance with all laws and all major Group policies, procedures and guidelines. The Code is available in all 19 Group languages.

The Group's new employee education is to cover not only Code of Ethics, but also conflict of interest, fraud, social media and Ethics and Compliance reporting. Key Roles for competition law compliance (CC) and anti-bribery and anti-corruption (ABAC) are also required to complete the relevant online education. The education modules will be assigned to the Group employees accordingly through the NSG Group Ethics and Compliance Education Center. We will continuously monitor its effectiveness as well as the completion rate of the trainings.

2148 (FY2020)

New starters completed the training packages at their onboarding

4040 (FY2020)

Key Roles completed the CC and/or ABAC trainings accordingly

Ethics Network

A Global Ethics Network is aimed to enhance the ethical culture and monitor compliance risks throughout the Group. The Ethics Network consists of senior managers who have been appointed Regional Ethics Ambassadors and Ethics Champions. Both roles will play a vital part in the communication and promotion of the Code of Ethics by leading and championing ethics and compliance in their local region or function which in turn will help embed ethics into the business.

46

Ethics Ambassadors across SBUs and Functions all over the world

Group E&C Function and Communication

Group Ethics and Compliance has a direct reporting line to NSG Group Audit Committee. Its responsibilities include the development, implementation and maintenance of an integrated internal ethics and compliance management and control system, as well as the creation and review of relevant Group policies and procedures.

Group E&C function has regional structure with E&C regional managers in Europe, North America, South America and Asia to embed E&C culture into the whole organization as well as cover risks in each region. In this regard, Group E&C puts importance on local communications including regional visits to reach out to local business/function people, liaising with the relevant Ethics Ambassadors and Champions.

Group E&C periodically issues Group Ethics and Compliance Briefings to employees. The Group's communications team translates the briefing into multiple languages and distributes to all NSG Group locations, which is also made available

on the Group's Intranet. In addition, each regional E&C manager issues regional E&C newsletter to the relevant local employees.

Group E&C shares with the heads of Strategic Business Units and HR the case details reported via the E&C Hotline system to help improve the workplace environment and even business performance while taking care of its confidentiality. Group E&C regularly reports to the Audit Committee.



Conflict of Interest Disclosure

Under our Code of Ethics, all employees are responsible for acting in the best interest of the Group. Employees are required to complete an educational module and at the end are asked to disclose any outside interest, activity or investment which actually or potentially could cause conflict against that of the Group, or otherwise certify they do not have any such conflict of interest. Group E&C reviews all reported disclosures and discusses certain matters with the relevant business or function head if necessary. Feedback is provided to all reporters and in some cases, possible plans to mitigate exposure are also provided.

Compliance System

To ensure transparency of employees' actions related to our core compliance programs, NSG Group requires the reporting of certain high-risk areas such as competition law compliance and ABAC. Group E&C centrally manages an online reporting system where employees are required to document or obtain prior permission from Group E&C whenever they contact our competitors, join a trade association, make charitable contributions, give or receive certain amount of gifts and entertainment, do businesses with third parties, and interact with public officials. The specific requests and notifications are reviewed and approved by the relevant E&C regional managers.

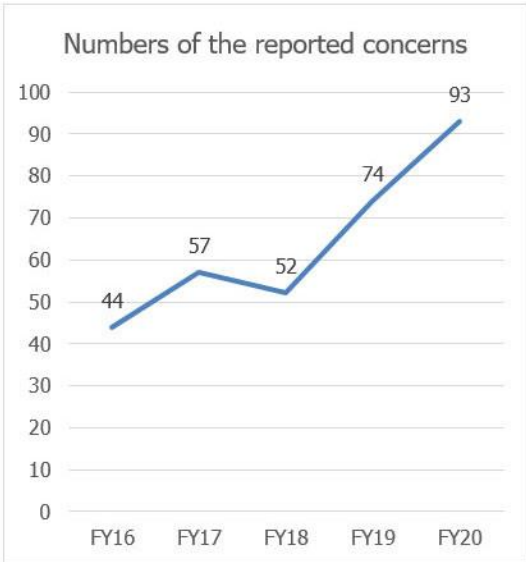
NSG Group is monitoring around 500 third parties such as agents, consultants and joint venture partners that meet certain risk criteria of ABAC. This process includes due diligence, assessment and reputational screening.

Reporting of Concerns – Ethics and Compliance Hotline

NSG Group is committed to maintaining an environment in which employees can report, without fear of retaliation, any conduct they know of or suspect to be in violation of law, Group Code of Ethics policies/procedures or guidelines.

For this purpose, [the Ethics and Compliance Hotline system](#) provides an easy and simple way to report concerns, while employees are encouraged to speak to HR or line management first.

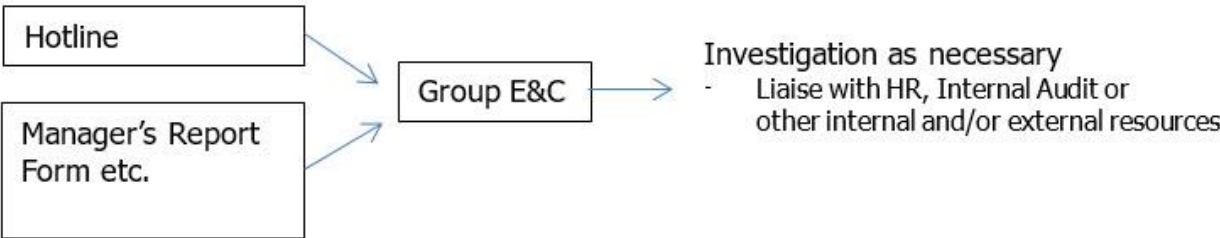
Categories of the reported concerns	%
Accounting and Financial Reporting	2%
Misuse, Misappropriation of Corp. Assets	4%
Environmental, Health & Safety	6%
HR, Diversity and Workplace Respect	52%
Business Integrity	25%
Inquiries	11%



Hotline	<ul style="list-style-type: none"> ■ Open to third parties ■ Anonymous report is acceptable unless prohibited by law. ■ 7/24/365/Multiple languages ■ Toll free ■ Anyone can ask questions. ■ Operated by a qualified third party with a data privacy module
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Managers who received the report from their colleagues must file the designated reporting form (Manager's Report Form) or report it directly to Group E&C if he/she believes that it has a potential adverse or negative legal, financial or reputational impact on NSG Group.

Any form of retaliation against an individual who has reported a concern or incident in good faith shall not be tolerated.



Since inception in FY2013 there have been 377 reported concerns managed via the Ethics and Compliance Hotline case management system. FY2020 experienced 93 allegations reported via the Ethics and Compliance Hotline and Manager's Report Form. The number of the cases is consistently increasing due to the communication and promotion of the system within the organization, which we believe contributes to realizing more transparent corporate culture throughout the NSG Group. NSG Group constantly measures the effectiveness of the system by using the metrics against the industry benchmark region by region.

Executive Officers and Corporate Officers (As of 16 July 2020)

Representative Executive Officers



Shigeki Mori
Director
Representative Executive Officer
President and CEO



Clemens Miller
Director
Representative Executive Officer
Executive Vice President and COO



Kenichi Morooka
Director
Executive Vice President and Chief
Administration Officer (CAO)
and Chief Risk Officer (CRO)

Senior Executive Officers



Tony Fradgley
Head of Automotive AGR SBU and
Head of Automotive OE SBU



Koichi Hiyoshi
Chief Legal Officer (CLO) and
Company Secretary



Satoshi Ishino
Chief Development Officer (CDO),
Head of Creative Technology SBU,
Head of Business Innovation Centre



Reiko Kusunose
Chief Financial Officer (CFO)



Hiroshi Nishikawa
Head of Technical Glass SBU

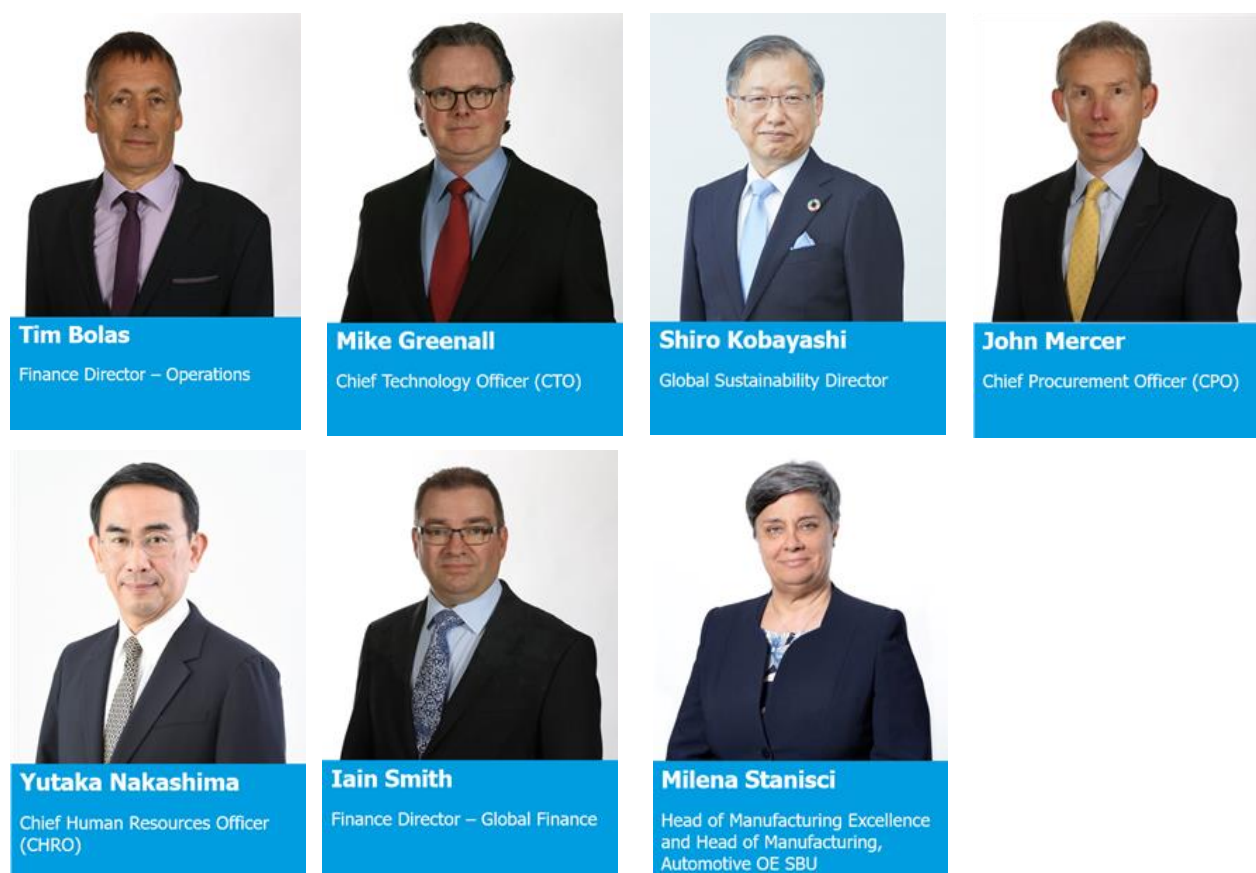


Jochen Settelmayer
Head of Architectural Glass SBU



Phil Wilkinson
Head of Automotive AGR SBU

Executive Officers



Senior Corporate Officers

Munehiro Hosonuma	Chief Corporate Planning Officer (CCPO)
Takashi Suzuki	Head of Architectural Glass SBU Asia
Katsunori Tatamoto	Head of Automotive OE SBU Asia

Corporate Officers

Hiroshi Aiura	Head of Treasury Japan
Kazumitsu Fujii	Corporate Strategy Officer
Akihiko Miki	Finance Director Asia and Japan
Shoji Miyanomoto	Managing Director Architectural Glass Japan
Paul Ravenscroft	Head of Mergers and Acquisitions
Yasuhiro Saito	R&D Director Japan

Risk Management

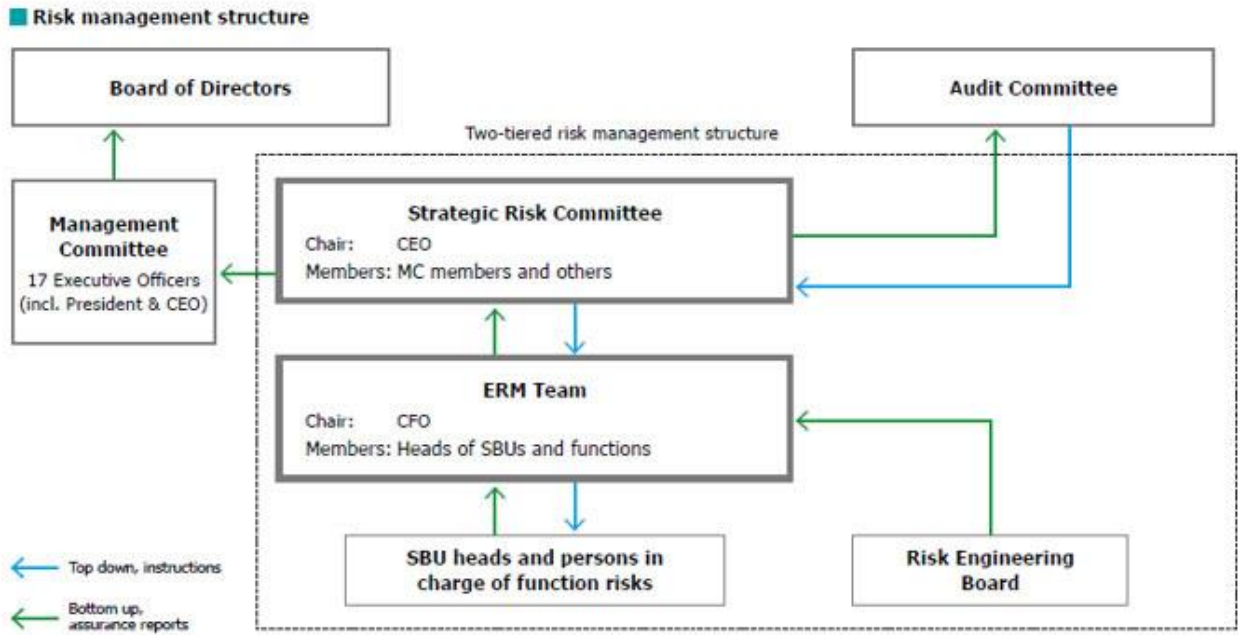
Basic Policy

Consistent with the "Our Vision" management principles, NSG Group aims to enhance corporate value by way of sustained growth in line with MTP Phase 2. That said, the business environment enveloping the Group is becoming increasingly complex and showing signs of a dynamic transformation. We see risks in the uncertainties that stem from internal and external factors and affect the Group's ability to achieve its business targets. We therefore position risk management, which is tasked with identifying, assessing, and properly managing major risks, as an important part of our management foundation in order to minimize the negative effects and maximize positive results. And by systematically and methodically implementing appropriate risk management across the entire Group, we can not only achieve our business targets, but also reliably execute business strategies.

NSG Group's risk management is carried out in accordance with our Basic Policy on Internal Control Systems, which was resolved by the Board of Directors pursuant to the provisions of the Companies Act. Specific measures for addressing risks that arise in connection with our corporate activities are prescribed in our NSG Group Risk Management Policy and are consistent with ISO 31000 (principles and guidelines on risk management).

Framework

NSG Group employs a two-tiered risk management framework comprising the Strategic Risk Committee (SRC) and the Enterprise Risk Management (ERM) Team, both of which are under the supervision of the Management Committee.



The SRC's members are mostly executive officers, while the CEO serves as Chairman. One of the executive officers is appointed Chief Risk Officer (CRO).

The SRC determines the companywide risk management framework, based on which it classifies high-level risks thought to have a serious impact on the Group and risks that ought to be managed by SBUs or Group functions. It then monitors how those risks are being addressed and requests that measures be taken if required. For high-level risks, the SRC appoints "risk owners" to manage the collection of risk information and the progress of countermeasures.

The CRO presides over all SRC meetings and as representative of the committee, periodically reports to and receives feedback from the Management Committee and the Audit Committee mainly regarding the effectiveness of the Group's basic internal control system and risk management structure. In FY2020, the SRC convened three meetings and reported once each to the Management Committee and the Audit Committee.

The ERM Team is chaired by the CFO and its members comprise SBU general managers and heads of functions such as accounting, finance, and human resources. Every year this team identifies, assesses, and prioritizes risks pertaining to business execution and endeavors to improve the effectiveness of risk management by formulating necessary measures to mitigate risks. The ERM Team periodically, or whenever requested, reports on its activities to the SRC.

The Internal Audit Department's role is to provide assurance from an independent standpoint regarding companywide efficiency of risk management.

As for the sharing of risks, we established the NSG Group Insurance Policy. We identify risks such as losses caused by natural disasters. Every year under the supervision of the SRC, we implement, or review, the Group's comprehensive insurance coverage under our global insurance program.

Major Risks for NSG Group

The SRC identified, assessed, and listed in order of priority the following risks from among the major risks it monitored in FY2020. Risk owners for each type of risk are appointed from among the executive officers to take responsibility for appropriately dealing with risks.

Risk
1. Business continuity risk
2. Non-performance of shipping contract by supplier
3. Cyber risk
4. Loss of competitiveness to key customers
5. Economic risk
6. Financial risk
7. Labor/talent shortage
8. Compliance risk
9. Ascertaining and responding to technological innovation
10. Business strategy risk
11. Product quality risk
12. Risk pertaining to new or amended laws and regulations
13. Intellectual property risk
14. Organizational culture capable of swiftly responding to changes

Business Continuity Risk

In preparation for the occurrence of a serious accident or large-scale disaster and as part of its business continuity management, NSG Group has organized teams and formulated plans at each business site so serious incidents can be managed in accordance with NSG Group Business Continuity Policy and Serious Accident Management Guidelines. Since 2013, we have prioritized our main business sites in drafting and rehearsing comprehensive business continuity plans.

Materiality

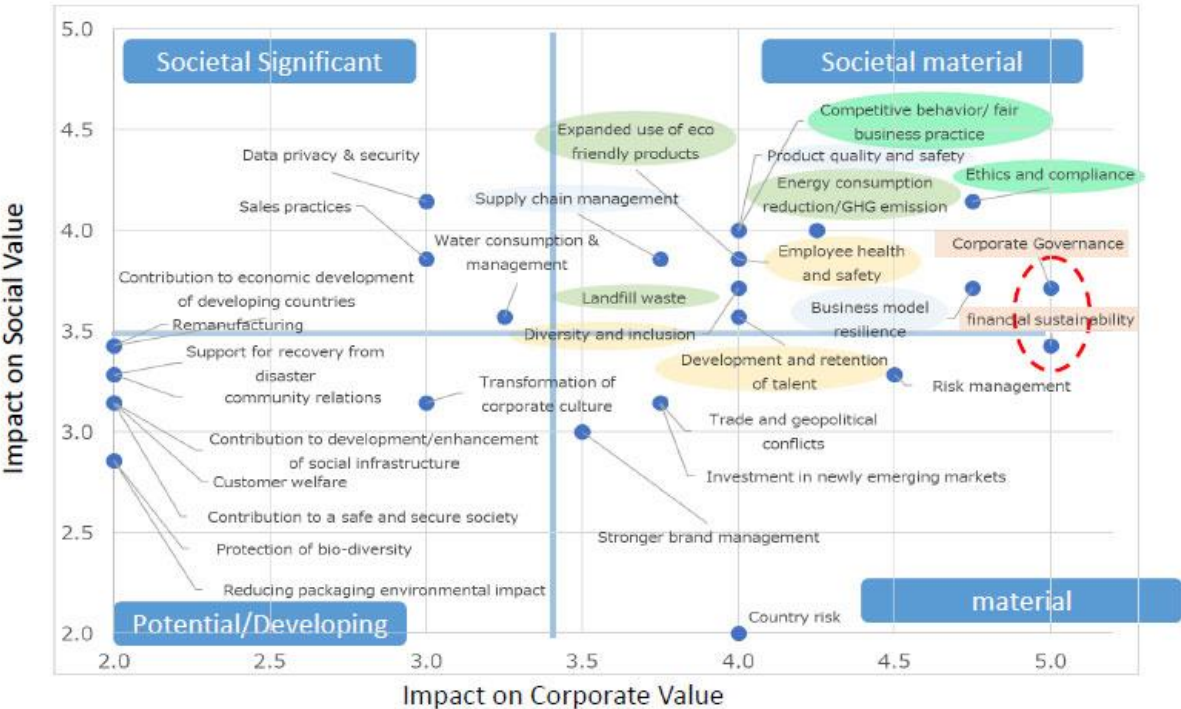
Based on "Our Vision" announced in 2018, the Group redefined the Materiality in the process of discussion in trying to formulate a new mid-term management plan.

The following five items have been identified as Materiality to attain sustainable growth of the Group and contribute to a sustainable society in the medium- to long-term. The Group selected these five items according to their significance as assessed on the matrix measuring the axes of impacts on both society and the Group.

New Materiality



Each item is categorized by referring to the classification in the criteria such as SASB or IIRC, the impact on each stakeholder is scored, and the item with the highest score on the two axes is reclassified as the "priority area" and selected. Of these, "Corporate governance" and "Securing financial base" have extremely strong impact on the Group and are also the foundation of it, so they are set as the issues that the Group will focus on separated from the selection of materiality.



The Group will set targets for each item and take specific actions accordingly.

Environment	Aspiration	Contribute to the realization of a decarbonized society with GHG emissions reduction by eco-friendly manufacturing process and sales expansion of eco-friendly products
	Background and Focal Points	<p>The glass manufacturing is a fossil fuel-consuming industry. Therefore, it is the most critical challenge for us to address such initiatives as reduction of GHG emission, saving energy and waste management in order to improve environment so that we can attain sustainability for society and the Group. At the same time, we also believe it is mandatory for us to contribute to preserving the environment through provision of products and services. Aiming Carbon Neutral with eco-friendly manufacturing process and products & zero waste to landfill.</p> <ul style="list-style-type: none"> • Energy consumption & GHG emissions reduction (realize eco-friendly manufacturing process) • Sales expansion of eco-friendly products • Reduction of waste to landfill
Society Shift and Innovation	Aspiration	Identify significant challenges to society and providing technology/product/service to their solution in a timely fashion
	Background and Focal Points	<p>Always keep an eye on the rapidly changing movements of society, accurately grasp the flow, and then aim to be the company contributing to the stakeholders with identifying significant challenges to society and providing technology/product/service to their solution in a timely fashion, which are the source of innovation.</p> <ul style="list-style-type: none"> • Innovate new products/service and revenue increase • Strengthen business development and R&D function
Safe and High-Quality Products and Services	Aspiration	Enhance both the products and service quality through improvement of quality and supply chain control
	Background and Focal Points	<p>As a manufacturer, it is the minimum mission for our stakeholders to continue to provide safe and high-quality products in a stable manner. In addition, the value of not only products but also services will be much required. The Group aims to increase value for the stakeholders and ensure sustainable growth by consistently supplying customers with safe and high-quality products and services.</p> <ul style="list-style-type: none"> • Enhance quality assurance • Enhance supplier management • Enhance service culture
Ethics and Compliance	Aspiration	Carry off significant trust from stakeholders by constant address on Ethics and Compliance
	Background and Focal Points	<p>As a member of society, it is an essential mission to respect and comply with the rules of society. The Group is aiming to be the company which carry off significant trust from stakeholders through constantly addressing on E&C activities to avoid corporate value deterioration.</p> <ul style="list-style-type: none"> • Identify/address and info. sharing for E&C risks • Fair business practice – anti-bribery/corruption, Conflicts of interest and competition compliance • E&C governance and oversight
Human Capital	Aspiration	Ensure sustainable growth of the Group and contribute employees' welfare through a variety of initiatives to enhance developing Change Leaders at global level, safety, health, and Inclusion and Diversity.
	Background and Focal Points	<p>Under one of the core values, "Respect others and unleash their potential", the Group addresses a variety of initiatives to enhance safety, health, I&D while engaging in development/creation of talents who would ensure sustainable growth of the Group. At the same time, we aim to be the company contributing employees' welfare. Ultimate goal for the safety is to keep zero injury.</p> <ul style="list-style-type: none"> • Inclusion and Diversity • Health and Safety • Human development

Sustainability

Our environment is the basis of all our business and we will protect nature, communities and people.

Contents

CEO Message	--- (54)
Approach to Sustainability	--- (55)
Sustainability of NSG Group	--- (56)
• Targets and Results	--- (56)
• Climate Change	--- (61)
• UN Global Compact	--- (67)
• Policy	--- (68)
Environment	--- (69)
• Energy	--- (70)
• Air Emissions	--- (75)
• Water	--- (78)
• Materials	--- (80)
• Waste and Circular Economy	--- (83)
• Environmental Compliance	--- (87)
• Certification	--- (89)
• Suppliers	--- (90)
Social	--- (97)
• Human Resources	--- (98)
• Inclusion and Diversity	--- (99)
• Employees	--- (103)
• Gender Pay Gap Reporting	--- (107)
• Health and Safety	--- (108)
• COVID-19	--- (111)
• Communities	--- (114)
Data for Environment/ Human Resources	--- (118)
Evaluation by External Party	--- (124)



CEO Message

Our strategy and policies underline the unique contribution our products can make to addressing climate change and the challenges we face in improving our own energy usage and resource management. Good management of our people, our resources, our communities and our environment also makes good business sense. This covers our activities and progress over the past year and our targets for the future.



Shigeki Mori
President & CEO, NSG Group

In pursuit of our Group mission of "Changing our surroundings, improving our world", we aim to contribute to a sustainable society. This will be done by addressing environmental opportunities and fulfilling our Corporate social responsibilities through proactive actions.

We are fully committed to mitigating the social impact of climate change and the environmental burden by proactively addressing the reduction of greenhouse gases generated in the manufacturing process and providing products that contribute to energy conservation. We strive to make a significant contribution to societies and the environment.

The sustainability targets are set in light of the long-term strategic priorities of the Group. By managing the environmental impact of the activities, we will continue to work in harmony with our local communities and challenge ourselves to improve energy efficiency and resource management. We continue to reduce greenhouse gas emissions through improved utilization of our facilities and energy saving initiatives.

Health and safety of our employees, and of all our stakeholders, is fundamental to our business. The annual 'NSG Group Safety Day' clearly demonstrates this principle. Our Code of Ethics, a natural extension to the UN Global Compact, provides practical guidance on how we should conduct ourselves in our day-to-day business. The NSG Ethics and Compliance Hotline allows anyone, not to mention all employees to raise concerns for illegal acts or misconduct without fear of retaliation.

Good corporate governance is a foundation of the sustainable development of the NSG Group. Our Corporate Governance Guidelines are defined to strengthen this purpose and to signify our support for the Principles of the Tokyo Stock Exchange Corporate Governance Code.

We will continue to embed the principles of sustainability by working safely and ethically, and by making a positive contribution to our environment.

Shigeki Mori
President and Chief Executive Officer

Approach to Sustainability



NSG Group will grow together with society through sustainability activities

Sustainability initiatives are important activities that balance both environmental & social issues of society and the sustainable development of our business. They are also effective in terms of risk management and cost reduction.

The NSG Group first established a sustainability policy in 2009 and has promoted sustainability activities throughout the group, led by the Sustainability Committee. Sustainability targets, which are indicators of our activities, are set based on SDGs and material issues identified in consideration of the impact of our activities on the environment & society and requirements of our stakeholders.

Minimizing safety risks is a prerequisite for our business. We have robust safety programs in place and our top priority is to keep the workplace safe. As a group target, we have been working to reduce the Significant Injury Rate.

Responding to a circular economy is a very important issue for a manufacturing company. While minimizing the consumption of natural resources, we are continuously working to reduce waste to landfill.

To respond to climate change, NSG Group has set Science-Based CO₂ reduction targets and we actively work to shift to renewable energy and reduce CO₂ emissions in our manufacturing process. Together with the further creation of environmentally friendly products, the target forms the framework of the NSG Group's climate change strategy. The Group also has a target to reduce CO₂ emissions per unit production. We will endeavor to disclose information on climate change risks and opportunities in line with the TCFD.

Supply chain risks and impacts, especially raw material sustainability and supplier environmental and human rights performance are of great concern to the NSG Group and our stakeholders. To avoid any concerns about these points, we ask our major suppliers to accept the "Supplier Code of Conduct". In addition, the actual performance is evaluated by an independent and specialized external organization. We are requesting suppliers who handle substances with a high risk of environmental impact to introduce an environmental management system.




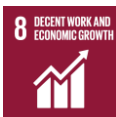

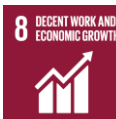





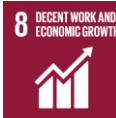




People are NSG Group's most important asset. We conduct regular employee engagement surveys and use the feedback to improve our leadership and development training programs and to create a healthy and motivated work force. Improving inclusion and diversity is a key issue for our global organization, being widely recognized as enhancing both corporate value and working lives of employees.



The NSG Group recognizes the importance of corporate governance and ethical business activities, and will sincerely respond to the growing needs of stakeholders. Based on the NSG Group Corporate Governance Guidelines, we have introduced a group policy regarding compliance and concern reporting. The Group Code of Ethics expresses our determination to engage in business in an ethical manner and minimize regulatory and social valuation risks. We regularly conduct in-house training to disseminate ethical business information throughout the Group.

Executive Officer
Head of Group Sustainability
Shiro Kobayashi

Targets and Results

FY24 Targets

	FY2024 targets	SDGs
Environment	<ul style="list-style-type: none"> • 8 percent reduction in CO2 intensity across glass manufacturing operations compared to FY18 • 20 percent reduction of waste to landfill compared to FY20 	  
Human Capital	<ul style="list-style-type: none"> • Reduction of Significant Injury Rate (20 percent vs. FY20) • Employee Engagement, "Our Vision" penetration ratio (80 percent) 	 
Responsible sourcing	<ul style="list-style-type: none"> • To achieve and maintain a 95 percent acceptance of the NSG Supplier Code of Conduct by our key suppliers. • To assess and monitor the sustainability performance of 65 percent of our suppliers by external spend. • To achieve and maintain an average 50 sustainability score for all assessed suppliers. 	        
Ethics & Compliance	<ul style="list-style-type: none"> • Hot line utilization (Actual vs. benchmark data collection/analysis) • Increase of hotline calls from Managers Report Form vs. FY20 (30 percent increase) 	 

	<ul style="list-style-type: none"> • Education completion ratio (95 percent completion by managers within 55 days) • Top level communications (Minimum four annually (CEO/C-Suite)) 	 
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Targets and Results

FY20 Targets and Results

	FY2020 targets	FY2020results															
Safety	<ul style="list-style-type: none"> Reduce Significant Injury Rate by 10 percent per year 	<ul style="list-style-type: none"> FY2020 SIR result was at the same level as FY2019. <p>SIR improvement rate against prior year (%)</p> <table border="1"> <thead> <tr> <th></th> <th>FY2017</th> <th>FY2018</th> <th>FY2019</th> <th>FY2020</th> </tr> </thead> <tbody> <tr> <td>Target</td> <td>10.0</td> <td>10.0</td> <td>10.0</td> <td>10.0</td> </tr> <tr> <td>Result</td> <td>3.0</td> <td>6.3</td> <td>(3.3)</td> <td>0.0</td> </tr> </tbody> </table> <p>Up to FY2016, after more than 10 years of safety activities, accidents related to employees' safety awareness, such as glass cuts and falls, continued to occur. In FY2017, a new safety activity, called NABIS was started, but the targets have not been achieved. Improving safety awareness requires long-term efforts, and NSG Group will continue NABIS activities to raise the level of safety culture.</p>		FY2017	FY2018	FY2019	FY2020	Target	10.0	10.0	10.0	10.0	Result	3.0	6.3	(3.3)	0.0
	FY2017	FY2018	FY2019	FY2020													
Target	10.0	10.0	10.0	10.0													
Result	3.0	6.3	(3.3)	0.0													
Waste	<ul style="list-style-type: none"> Reduce waste to landfill by 12kt (40 percent reduction vs. FY2014) 	<ul style="list-style-type: none"> The NSG Group has implemented a new environmental reporting tool and the improvements in reporting and data monitoring has highlighted some previous mistakes in waste to landfill reporting that have now been corrected. <p>The integrated report 2019 explained FY2019 progress was 37 percent reduction versus the baseline year FY2014, but with the new tool incorrect classification of waste was discovered. The corrected progress of waste sent to landfill was 23.4 percent reduction.</p> <p>Following the above corrections, the FY2020 waste reduction versus FY2014 was only 8.5kt (28.0 percent reduction) and the target – that was based on a partly incorrect improvement perception - was not fully achieved.</p>															
Energy and CO2 reduction	<ul style="list-style-type: none"> One percent year on year reduction in CO2 intensity across glass manufacturing operations 	<ul style="list-style-type: none"> The target was achieved in FY2017-2019. The target was not achieved in FY2020 due to a reduction in product output associated with deteriorating market conditions. 															

		Improvement rate against prior year (%)			
		FY2017	FY2018	FY2019	FY2020
		Target	1.0	1.0	1.0
		Result	1.5	1.4	(1.4)
Sustainable value-added products	<ul style="list-style-type: none"> • Increase proportion of value-added products in total sales to 50 percent or more in FY2020s • Demonstrate the added environmental or social benefit of products 	<ul style="list-style-type: none"> • The VA products ratio in FY2020 was 46 percent and it was a little below the target. 			
Responsible Sourcing and transportation	<ul style="list-style-type: none"> • 10 percent year on year increase in Supplier Code of Conduct acceptance by our key suppliers • Extend sustainability assessments for key suppliers and continue to monitor suppliers that use materials with a potentially high environmental impact 	<ul style="list-style-type: none"> • 85 percent of Key suppliers have now agreed to the SCoC or can demonstrate their own equivalent code. The Supplier Code of Conduct was last revised in 2017 to incorporate legislation, including modern slavery and human trafficking. • We have significantly improved our supplier sustainability evaluation by the employment of a specialist independent evaluation agency - EcoVadis. As a result, assessments were completed for 36 percent of our suppliers by external spend. In addition, we monitor our suppliers using materials with a potentially high environmental impact, and in accordance with our Supplier Performance and Risk Management Procedure require them to be certified to ISO14001 or a recognized national equivalent. 			
Employees	<ul style="list-style-type: none"> • Improve the Engagement score by 5 points by the end of FY2020 • Train all managers in the new Appraisal Model and Talent System by the end of FY2019 • Increase the skills of our newly appointed or prospective plant managers by 50 percent of the target population attending the Plant Leadership Program by the end of FY2020 	<ul style="list-style-type: none"> • Engagement Score from FY2020 was 75, providing an overall improvement of 3 points from the base year FY2017. Also, it had 8 percent improvement against the prior year. • All SABA training completed and all Managers using the SABA system for Performance and Talent Activities. SABA is the software supplier to introduce the global cloud-based talent management system. • Completed. Over 60 percent (44 people) have received training. Programme planned for 2020 postponed due to Covid-19. 			

	<ul style="list-style-type: none"> • Increase Inclusion & Diversity awareness by training all managers with designated modules by the end of FY2020 	<ul style="list-style-type: none"> • D&I awareness training was completed by 98 percent of our Senior Management population. This awareness training continues to be issued to newly appointed senior managers as part of their induction process.
<p>Ethics and Compliance</p>	<ul style="list-style-type: none"> • Reissue Governance and Culture Leadership Assessment • Standardized New Employee Compliance Training Package • Ethics and Compliance Interview in the new appraisal system, SABA • Begin review of Code of Ethics 	<ul style="list-style-type: none"> • Randomly selected 5,000 Group employees were invited for 2019 ethical culture assessment and 85 percent of them did it and E&C is analysing its outcome for future action towards program improvement • Launched the training package for new employees covering Code of Ethics, conflict of interest, fraud, social media and Ethics and Compliance reporting and 2,148 people completed it. • Completed FY2019 appraisal process through SABA system which now included ethics and compliance interview • Started the process of reviewing Code of Ethics including other relevant policies and procedures such as competition law compliance, anti-bribery and anti-corruption, and whistleblower protection

Climate Change

Activities of Climate Change

Glass making is an energy-intensive process. Significant energy is consumed in melting the raw materials at a very high temperature for the manufacture of glass. NSG Group is proactively addressing reduction of greenhouse gases generated in the glass manufacturing process.

Despite this necessary resource consumption, this energy can be quickly saved when our products are in use. Our products make a positive contribution to climate change efforts and to the quality of living and working environments.

Requirements from regulators and customers are providing opportunities for sustainable and innovative product design in a shift to eco-friendly products.

Risk and Opportunity

In line with the TCFD framework, NSG Group considers risk and opportunity material to the financial performance of the Group as follows.

<p>Risks</p> <ul style="list-style-type: none"> - Translation Risk, for example; Cost increase by carbon pricing policy - Physical Risk, for example; Damage to production facilities by abnormal weather 	<p>Opportunity</p> <ul style="list-style-type: none"> - Expanding the market for products that contribute to reducing GHG emissions
<p>Mitigating Risks, examples include;</p> <ul style="list-style-type: none"> - Activities to achieve our SBT - Equipment maintenance and inspection - BCP creation at major sites - Review coverage of insurance against natural disasters 	<p>Activities for seizing opportunity, examples include;</p> <ul style="list-style-type: none"> - Expansion of Eco-friendly products' sales - Continuous development of new products within NSG Group portfolio - Collaboration with key stakeholders

Climate Change

Activities to achieve Science Based Targets (SBT)

The Greenhouse gas reduction target of NSG Group has been approved by the Science Based Targets initiative (SBTi*) in October 2019 as "a science-based target to limit the average rise of global temperature to below 2°C from pre-industrial revolution levels" in line with the goals of the Paris Agreement.

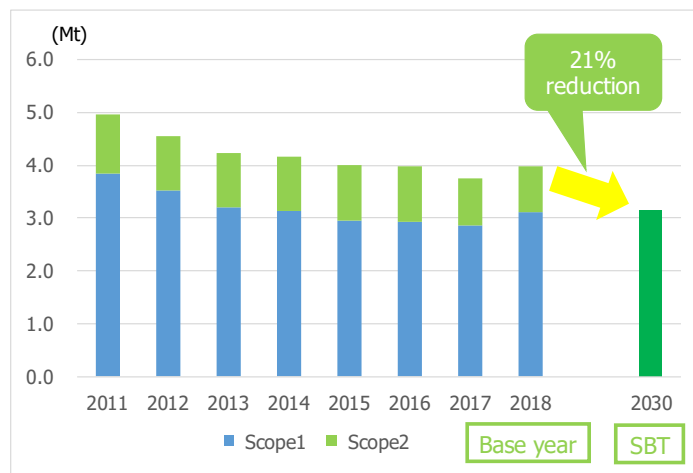
By 2030, NSG Group targets to reduce absolute GHG emissions (Scope 1 and Scope 2**) by 21 per cent compared to the 2018 level.

Committed to help mitigate risks of climate change, NSG Group is actively pursuing the following measures:

- Converting the energy source in glass manufacturing processes from heavy oil to natural gas.
- Implementing the measures, including the use of LED lights, inverters and waste heat, to reduce CO2 emissions in glass manufacturing processes.
- Expanding the use of renewable energy.
- Supplying the glass products highly effective in saving and generating energy to reduce CO2 emissions.

By reducing CO2 emissions from business operations and supplying innovative glass products, NSG Group will continue its contributions to mitigating climate change risks.

■ CO2 emission and SBT



*SBTi is a partnership between CDP (former Carbon Disclosure Project), UN Global Compact, WRI (World Resources Institute) and WWF (World Wildlife Fund), which helps companies set the science-based goals for reducing GHG emissions to prevent the impact of climate change.



SCIENCE
BASED
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

**Scope 1: Direct emissions by business operators (Use of fuel in manufacturing processes, etc.)
Scope 2: Indirect emissions by consumption of energy sources (Purchased electricity used in manufacturing processes, etc.)

Climate Change

Eco-friendly Products

Architectural Products

Our Architectural Products play a vital role in improving energy efficiency and reducing CO2 emissions. They also offer other advanced functionality, protecting against fire, insulating against noise, safety and security, privacy, decoration and even self-cleaning properties.

Affordable Clean Energy

With our solar photovoltaic and concentrated solar power glass range, we help to generate renewable energy reducing CO2 emissions significantly.

Our range of solar glass products includes NSG TEC™ and Pilkington Optiwhite™.



NSG TEC™ is a group of products, including a comprehensive range of TCO glass (Transparent Conductive Oxide coated glass), optimized to suit a variety of thin film photovoltaics (PV) modules.



Pilkington Optiwhite™ is a range of extra clear low-iron float glass products with very high solar transmittance, offering improved solar energy conversion and consistent performances. This range of low-iron glass products is suitable for use in thin film photovoltaics, concentrated solar power technology, solar thermal collectors and solar mirrors.

Sustainable Cities and Communities

NSG Group's broad solar control glass range can help reduce unwanted heat gain to avoid unnecessary energy consumption for air conditioning. And they help to save CO2 across the world with our insulating low emissivity products.

Unwanted heat gain

NSG offers a wide range of products for solar control benefit, for example:



Pilkington Solar-E™ is a range of good solar control performance on-line coated glasses offering low solar heat coefficient gain, low reflectivity, reduced glare and low-emissivity.

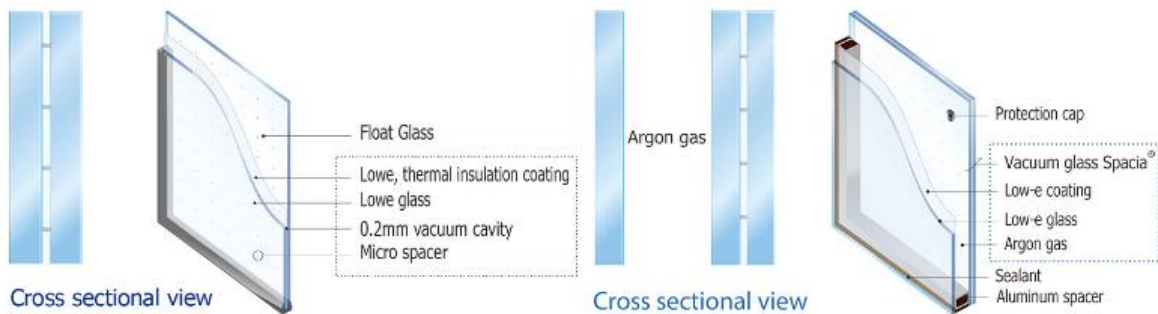


The Pilkington Suncool™ Range comprises our highest performing off-line coated, solar control and low-emissivity glass products.

Insulating low emissivity products

NSG improves the energy efficiency of domestic or commercial buildings around the globe, for example:

NSG Spacia™ is a unique Insulating Glass Unit which provides similar or better energy efficiency performance as an IGU unit, but in a much thinner profile, so it can be used in slim frames.



The Pilkington Optitherm™ Range are high performance, off-line coated low-e glass products specially developed for use in Insulating Glass Units (IGUs) to help with energy saving.

Automotive Products

The NSG Group's advanced automotive glazing is used to improve the safety, efficiency, and comfort of the vehicles we drive.

The importance of environmentally-friendly vehicles is growing which is increasing consumer demand in the market. NSG's light-weight designs and solar control glazings are just a few of the ways we are able to contribute to reduced CO2 emissions and improve the overall energy efficiency of the vehicles we drive.



CONSERVING ENERGY THROUGH GLASS TECHNOLOGY

Electric vehicles produce no exhaust emissions so they are able to offer our world a cleaner means of transportation.

NSG's solar control and Low-E glass are already used extensively in buildings to improve energy efficiency, and we can offer the same benefits for vehicles.

Our vehicle-glazings can provide advanced solar control properties by absorbing or reflecting infra-red energy from the sun. Control of heat energy entering vehicles directly impacts air-conditioning usage leading to reduced energy consumption and CO2 output.

Low-Emissivity glazing

Low-E glazing can provide benefits in cold climate environments by improving vehicle efficiency through a reduction in HVAC usage to extend electric vehicle battery range. NSG offers the best thermal performing product that can be used for monolithic tempered glazing.

Infra-Red Reflective Glazing



NSG coated windshields reflect more than 30 percent of the sun's energy which is more than five times that of a standard glass. This particularly benefits the new generation of vehicles that are commonly designed with larger glass areas.



Weight saving in vehicles helps them to achieve their CO₂ emissions targets as well as or an increased range for electric vehicles. It is possible to achieve a 40 percent weight reduction in the glass component while also maintaining its solar and acoustic performance with no additional risk from debris impacts.

Creative Technology

Our glass technologies are used to improve the energy efficiency and sustainability of products across a diverse range of market segments.

Glass is a high-tech material equipped with many properties such as being light, strong, fire retardant, non-conductive and resistant to chemicals. Our patented products are used in transmission belts to improve fuel consumption, for LED printers that use less energy to operate, and for coatings to protect the longevity of our buildings and equipment. Our expertise in manufacturing ultra-thin float glass UFF™ is contributing to the development of the next generation touch-screen devices.

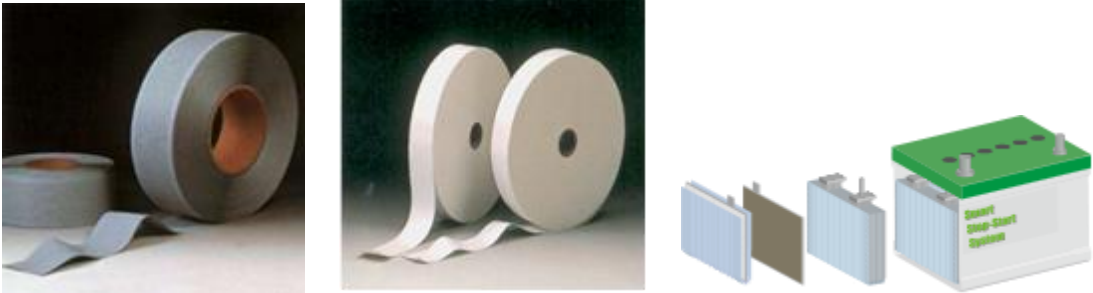
Glass cord engine timing belts

Timing belts made with NSG'S glass cord realizes higher driving efficiency for automotive engines, thus contributing to saving fuel consumption and reducing CO₂ emissions compared to metal chains. We are also working on development and expanded use of more efficient and higher modulus glass cord.



Battery Separator for Cars with Start-stop System

In recent years, vehicles with start-stop technology have been rapidly spreading. On the other hand, as these cars require much more engine rotations when starting, higher durability is needed for their batteries. Our battery separators have features and durability that match these conditions and contribute to CO2 emission reduction by promoting cars with a start-stop system.



UN Global Compact

Participation to the United Nations Global Compact

NSG Group has been an active participant in the United Nations Global Compact (UNGC) since January 2012. We support the ten principles of "Human Rights, Labor, Environment, and Anti-Corruption" advocated by the United Nations Global Compact, and practice them through all our business activities. These ten principles are in common with the NSG Group's Code of Conduct, which sets out corporate responsibility for society and the environment.

The UN Global Compact expects each company to demonstrate responsible and creative leadership in order to achieve sustainable growth of the world. The UNGC was advocated by Coffey Annan, the United Nations Secretary-General (then), at the 1999 World Economic Forum (Davos Conference), it was officially launched in 2000 at UN Headquarters. As of September 2020, more than 15,000 companies and organizations have participated worldwide.

The Ten Principles of the UN Global Compact

<Human Rights>

- Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and
- Principle 2: make sure that they are not complicit in human rights abuses.

<Labour>

- Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
- Principle 4: the elimination of all forms of forced and compulsory labour;
- Principle 5: the effective abolition of child labour; and
- Principle 6: the elimination of discrimination in respect of employment and occupation.

<Environment>

- Principle 7: Businesses should support a precautionary approach to environmental challenges;
- Principle 8: undertake initiatives to promote greater environmental responsibility; and
- Principle 9: encourage the development and diffusion of environmentally friendly technologies.

<Anti-Corruption>

- Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery



Policy

The following policies are published on our website.

Sustainability

[NSG Group Sustainability Policy](#)

Environment

[NSG Group Environmental Policy](#)

[NSG Group Energy Policy](#)

[NSG Group Water Policy](#)

Social

[NSG Group Health and Safety Policy](#)

Governance

[NSG Group Corporate Governance Guidelines](#)

Energy

We care passionately about the environment and are committed to integrating sustainability considerations into all our business decisions. As a minimum we comply with all relevant country-specific laws and regulations. Where relevant we take additional internal steps to meet our sustainability objectives, protect the environment and reduce any impact.

The use of many of our products will lead to positive environmental impacts and if adequately segregated, our glass is 100 per cent recyclable at the end of the product life.

Energy

Energy Usage

We work continuously to minimize energy input into all our processes, so that the usage of glass contributes net benefit to sustainability.

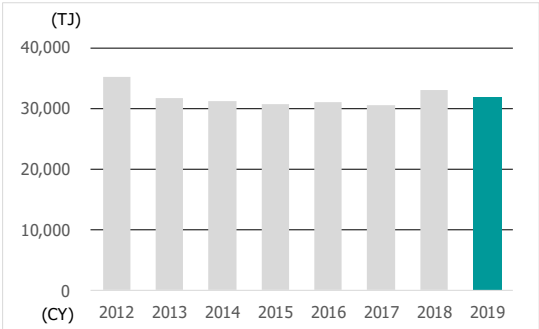
Our energy usage

For both environmental and financial reasons, we continue to use natural gas as the fuel of choice for glass melting.

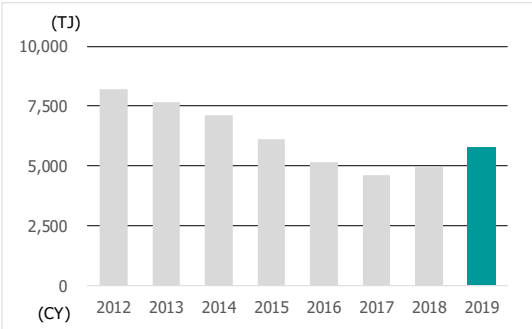
Furnaces continue to be converted from heavy fuel oil to gas. Small quantities of diesel and LPG are used for space heating and back up generators. See the graphs for consumption details.

NSG Group Energy Usage

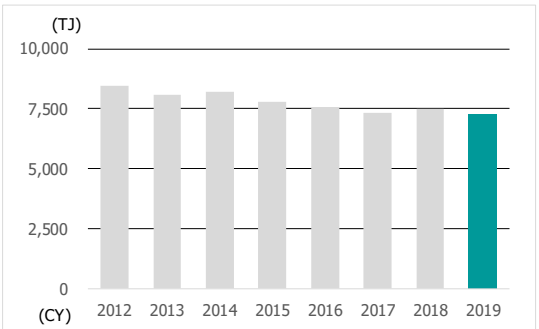
■ Natural Gas



■ Heavy Fuel Oil



■ Electricity



Initiatives to reduce energy usage & carbon (CO2) emission

Energy & Carbon Management

All initiatives are monitored by the Heads of SBUs and Group functions at six-monthly Energy & Carbon management Committee meetings, chaired by the Chief Operating Officer.

Energy & Carbon Management Core Team

A senior management team representing key functions including; manufacturing, engineering, procurement and R&D coordinate all project activities to ensure maximum engagement in the Group energy & carbon management program.

Energy & carbon management pilot plants

The concept of the pilot plants is to make a step change reduction in energy consumption & CO2 emission by using energy more efficiently and effectively. This initiative continues to expand across the Group with more than 25 sites engaged in the program. These sites represent in excess of 85 percent of NSG Group's energy spend and in excess of 75% of NSG Group's CO2 emissions.

Cross-functional pilot site teams are led locally by the plant manager, with proactive support from other Group functions, and extensive use is made of third-party suppliers. Over 850 projects have been implemented or continue to be evaluated.

Operational energy-efficiency projects

The Operational Cost Saving program aims to reduce all operational costs in the areas of prime and overhead costs. One of the largest prime costs for the Group is energy.

To support the cost saving activities across sites, a deep analysis of all energy projects within the OCS database is regularly completed. Multiple projects were identified for rapid dissemination in FY2020 to deliver energy consumption, CO2 reduction & cost savings. Each manufacturing site within the Group had at least one active OCS energy project in FY2020. Led by Manufacturing Excellence and assisted by other Group functions, NSG Group sites identified more than 150 energy-optimization opportunities, resulting in annual CO2 savings in excess of 25kt.

Major projects include; furnace fuel combustion optimization, reducing electrical requirements of motors, optimizing compressed air systems, energy sub metering, energy efficient lighting, fuel switching, cogeneration processes, waste heat and energy recovery.

An initiative to engage in Industry 4.0 or Internet of Things (IoT) for energy management was progressed during FY2020. This includes analytics of process data including energy metering with the goal of optimization of energy consumption & CO2 emission. The analytics also supports the identification and development of new projects, such as identifying energy waste & management of tariffs.

NSG are actively engaged in the development of glass industry decarbonisation roadmaps, with publication of these roadmaps for both the European and UK glass industry. This activity supports the development and application of both existing and novel technologies available across the glass industry, including recommendations for appropriate application at NSG Group sites.

A focus on the energy & carbon efficiency of operating furnaces when they are repaired was launched in FY2020. Specific targets for efficiency improvements in addition to the benefit of furnace repair have been established. This program has been implemented at several furnace repairs resulting in significant improvements in efficiency expected across the full life (at least 15 years) of the furnace operation.

R&D activity

Reducing CO2 emissions and maintaining the security of energy supply for our furnaces will remain fundamental to our continued business. Implementation of incremental technology changes will be required in the short term to minimize capital expenditure.

Project Carbon 2050 launched in 2018 supported the development and implementation of a decarbonization roadmap that identifies the technologies, barriers and financial investments required to achieve significant carbon emission reductions in float manufacturing by 2050. In FY2020 this project was expanded into several specific R&D projects to increase the focus in key technology application to support the delivery of the Group MTP targets and longer term Science Based Target goals.

One such project is related to the application of Hydrogen as a low carbon alternative fuel in the float glass manufacturing processes. NSG Group will test the use of hydrogen at its Greengate Works in St. Helens, U.K. A global first, the initiative is part of a project managed by HyNet, a consortium of industries in the North West of England, aimed at reducing carbon emissions from industry, homes and transport. NSG Group will investigate whether hydrogen can be used to wholly or partly replace the natural gas and oil that are the standard fuels for the glass making industries. If all of the natural gas can be replaced with hydrogen this would reduce emissions of CO2 by around 80%. The work is supported by £5.2m of funding from the UK government under the Industrial Fuel Switching Scheme with first trials planned for November 2020.



Management systems

We have maintained ISO 50001 certification across all operations in Germany, Italy, Finland and the Automotive engineering function. Investment in sub-metering hardware and software installations allows a high level of transparency in energy consumption and enables a sophisticated energy planning process with improvement activities, target setting and frequent reviews to be established.

Energy Savings Opportunity Scheme (ESOS)

All UK manufacturing sites are continuing to participate in the UK government Energy Savings Opportunity Scheme (ESOS). Currently in phase 2, the scheme is linked to the UK government commitment to the EU Energy Directive article 8. Sites are assessed by certified external auditors with the aim of identifying viable energy saving project activities. The assessment includes verification of energy consumption data and site energy audits which result in a set of published recommendations signed off by a UK senior management representative. A number of initiatives identified within the scheme have been implemented and disseminated across other regions. Similar schemes exist in several EU and other countries either at a mandatory or voluntary level with many sites participating.

Renewable on-site energy generation and alternative fuels

The on-site photovoltaic generation facility at our technical center in Lathom is now fully operational providing 30 percent of the site's annual electricity demand.

Our Northwood technical center in North America produces about 7 percent of its own electricity with on-site photovoltaic generation. We also have photovoltaic panels on the roof and former car parking areas of our German Weiherhammer plant.

We continue to evaluate and utilize alternative low carbon / renewable fuel sources across the Group operations. This includes use of waste derived biofuel oil which cuts CO2 emissions on a furnace by 8kt / year.

Partnership with suppliers

We continue to partner with key suppliers to develop projects to reduce energy consumption in our manufacturing sites.

Close collaboration with leaders in specific technologies is enabling us to implement optimum solutions to specific energy management challenges. Collaborative projects undertaken include; utilisation of battery storage systems to support reduction in consumption peaks in electricity demand, addressing compressor inefficiency and installation of high efficiency motors and to make better use of waste heat generated in our glass-making processes.

Employee energy efficiency awareness

An energy management training program, designed to help the Group deliver cost savings and reduced CO2 emissions, has continued to be rolled out globally.

Launched in 2016, the program has been implemented across European, South American, Japan and South East Asia operations.

The initial program involved local site energy champions in a 'back to school' initiative that increased levels of energy awareness and supports the on-going generation of energy and carbon management project activities.

The key aspect of the training is to help the delegates understand the approach to energy and carbon management, how they can identify and implement activities at their sites and encourage others to do so.

To date, the training has directly involved more than 60 delegates, with identification and implementation of over 200 projects.

Energy savings have exceeded ¥ 80 million, and reduced CO2 emissions by more than 2,000 tonnes.

The initiative comprises three levels of training, with level 1 involving 50 hours in all aspects of energy management.

The course is organized with the support of local functional teams and was led by David Cast, Climate Change Director, NSG Group.

It is designed to support site energy management activities and give formal qualifications to the delegates with the cost of the course being recovered by the delegates identifying and delivering energy cost-saving projects.

Following successful completion of level 1, delegates are encouraged, where appropriate to their role, to continue energy management training with external organizations leading to level 2 and level 3 qualifications. Several delegates across the NSG Group have achieved the level 3 qualification

Project examples that have been implemented so far include:

- LED lighting replacement and controls
- Staff awareness campaigns including 'shut-off' activity and inappropriate energy use
- Replacement of motors & drives with variable speed devices
- Optimizing combustion set up in furnaces and boilers

- Introducing energy 'mini audits' in daily routines (part of 5S activities)

The training material is available via various internal systems allowing new candidates to undertake the course remotely, with appropriate support. In addition, existing qualified energy champions can 'refresh' their knowledge to ensure they are well informed of the latest applications of technologies across the NSG Group and externally.

NSG Settimo site becomes fully decarbonized



The automotive SBU operations site in Settimo Torinese, Italy has become the first fully decarbonised site within the NSG Group.

Starting in April 2020, the site has been operating solely on renewable energy provided by a combination of certified renewable electricity and a district heating network.

This will reduce the site's emissions by 1,650 tonnes of CO2 per year, the equivalent of planting around 2,400 trees or removing almost a thousand cars from the roads.

Heat Recovery In Poland Operations

A four step program was initiated at the Automotive OE operation in Chmielow, Poland to recover and utilise waste heat generated at various stages in the manufacturing process. Stage 1 and 2 involved the capture and recirculation of heat generated from air compressors on the site. Stage 3 focused in capture and utilisation of waste heat generated from the air handling units providing conditioned air to the clean rooms for pre-lamination stage of the process. Step 4 is planned to install heat recovery units on the glass bending furnaces and utilise this heat for generation of hot water for plant space heating. Total energy savings delivered by the project will be in excess of 2.5 GWh/yr and in excess of 500 tonnes of CO2 avoided for generation of thermal energy.

Lathom Solar Project

NSG Group and Lightsource BP have installed and connected a 2.3MW solar installation at the European Technical Centre in Lathom, Lancashire, UK. The site is anticipated to provide 30 percent of the facility's annual electricity demand.

This project was developed and funded entirely by Lightsource BP, with no capital investment required from NSG Group and no disruption to their daily operations during construction.

NSG Group buys the clean, renewable electricity via a Power Purchase Agreement (PPA) with Lightsource BP, which provides a fixed, index-linked rate designed to hedge against future price fluctuations and deliver operational savings over the 25-year contract period.

This project is especially significant for both Lightsource BP and NSG Group as the installation showcases one of the glass manufacturer's own products. The solar modules selected were sourced from First Solar, one of NSG Group's largest global customers. Research and development for the glass contained within the solar modules was conducted at the European Technical Centre itself, where operations will now be powered by their own hard work.

As well as reducing electricity costs, the solar installation is a crucial part of NSG Group's drive to improve our sustainability credentials, and this project will help us meet carbon reduction targets by saving an estimated 848 tonnes in emissions each year - the equivalent of taking 180 family cars off the road.

Air Emissions

The main emissions from a flat glass furnace come from the combustion of fuel and the decomposition of the carbonate and sulphate raw materials. The raw materials are melted at a very high temperature so the process is extremely energy-intensive.

Emissions to air

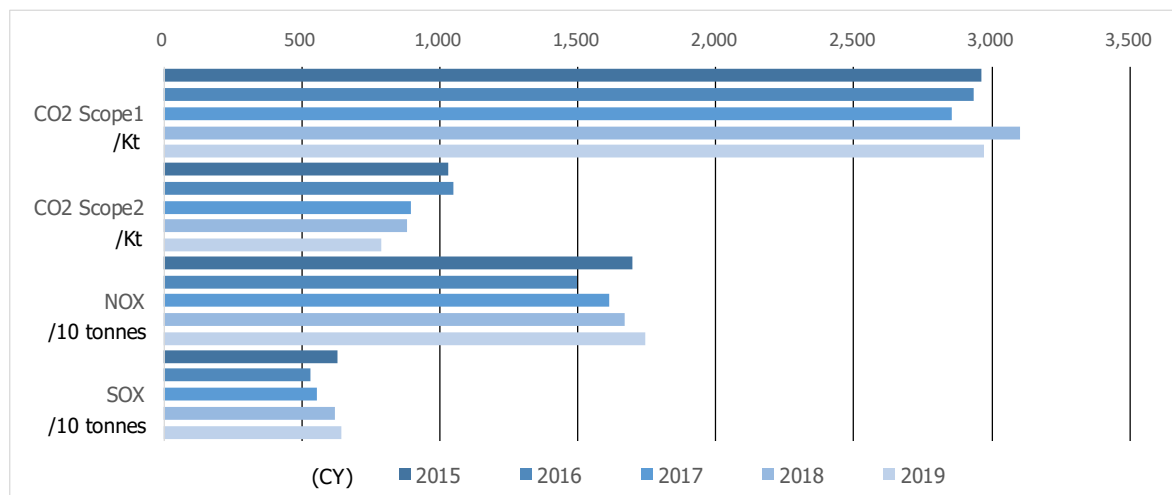
The most significant pollutants from a glass furnace are: nitrogen oxides formed from the nitrogen and oxygen in the air at high temperature; sulfur oxides from the refining agent (and from oil fuel if that is used); and particulate matter derived from compounds volatilized from the molten glass. Carbon dioxide comes from both the decomposition of carbonates and from combusted fuels.

We are tackling pollutant air emissions with a range of primary and secondary abatement techniques. Primary methods, such as special burners or carefully-chosen raw materials, including more cullet (recycled glass), reduce pollutant formation and can also improve the thermal performance of the furnaces.

Secondary abatement removes the pollutants from the furnace waste gases before they are emitted through the chimney.

Until recently, the furnace emission pollution control plants in operation around NSG Group have all been based on standard technology. This removes the pollutants from the waste gases in three stages: alkali is injected into a scrubber to remove acid gases, the resultant reaction products and particulate emissions are then collected in an electrostatic precipitator, and finally nitrogen oxide is removed using ammonia injected into a selective catalytic reduction unit. However, the latest pollution control plant built by NSG Group uses a novel technique called a catalytic ceramic filter, or CCF.

■ Air Emissions



Novel pollution control plant installed at Ottawa



The abatement plant just installed on NSG Group's OT1 furnace in Ottawa, USA, is a CCF unit purchased from McGill AirClean. The system is based on thousands of ceramic filters, or "candles", in a single unit. Alkali, in this case lime, is added to the waste gas and the resultant reaction products and primary particles are collected by the filter. The novelty of the process is that the fibers of the filters are coated with a metal catalyst so when the gases pass through the structure nitrogen oxides are also removed. It is expected that CCF technology will become the standard for new furnace pollution control plant throughout NSG group.

Monitoring and reducing carbon emissions

In 2019, NSG Group was responsible for the emission of 3.8 million tonnes of CO2e. This is a six percent decrease on the previous year due to a combination of reduced production output, increases in the proportion of renewable electricity use and many proactive operational energy and CO2 saving initiatives as described in the energy use section.

Our scope 1 emissions were 3.0 million tonnes. These direct emissions occur from a combination of the combustion of fossil fuels within the manufacturing process, transportation of product and the decomposition of carbonate raw materials in the glass melting process.

Our scope 2 emissions (market based approach) were 0.8 million tonnes of CO2e. Scope 3 emissions were estimated at 2.5 million tonnes of CO2e.

In the operation of our float plants, heavy oil to natural gas conversion has helped to reduce carbon emissions by around 50 percent over the past 40 years and a combination of design and operational innovations has made further progress.

We aimed to reduce CO2e emissions per tonne of equivalent product by one percent per year until FY20, using FY15 as a baseline performance. This target was achieved every year until FY20. The target was not achieved in FY20 due to a reduction in product output associated with deteriorating market conditions.

Moving forwards, NSG Group has already committed to a Science Based Target verified by the SBTi. This target is an absolute reduction of Scope 1 and Scope 2 CO2e emissions by 21% compared to a baseline year of 2018. In addition, we have introduced a revised target for CO2e emission per tonne of equivalent product, with the new target being an 8% improvement in this metric by end of FY24 compared to FY20 baseline.

	Tonnes CO2e / tonne equivalent product	Percentage improvement
FY2020	0.74	(1.4)
FY2019	0.73	2.1
FY2018	0.75	1.4
FY2017	0.76	1.5
FY2016	0.77	1.5
FY2015	0.78	1.2

Recycled glass to improve efficiency and reduce emissions

Glass for recycling is a valuable resource. Wherever quality allows, we recycle any glass off-cuts or cullet within our own glass melting lines. Glass from our downstream operations and from our customers represents a potentially useful resource to us. We gain a double benefit from the use of such cullet: its use to make glass reduces the requirement for raw materials and avoids disposing of what would otherwise be a waste material and closes the recycling loop.

Ten percent cullet use saves three percent furnace energy and leads to reductions in CO2 emissions. One of our sites has manufactured glass using only cullet.

Cullet return projects are ongoing to try to minimize the need for virgin raw materials. Landfill is the least favored disposal option.

If glass is produced that cannot be remelted on-site, it is sent, where practicable, for external recycling.

New pollution control unit at San Salvo

A new NOx control unit (SCR technology) is being retrofitted downstream the existing pollution control plant of San Salvo line 1 (SS1). The NOx abatement plant was purchased from the German company GEA, a well-known firm in the pollution control field. Once the installation is complete and the SCR unit started up, this will be the last step in the control of SS1 Float furnace pollutant emissions. In addition to the obvious beneficial effects on the environment, the new unit will give SS1 Float furnace additional flexibility in the combustion control, with potential benefits in the glass final quality.



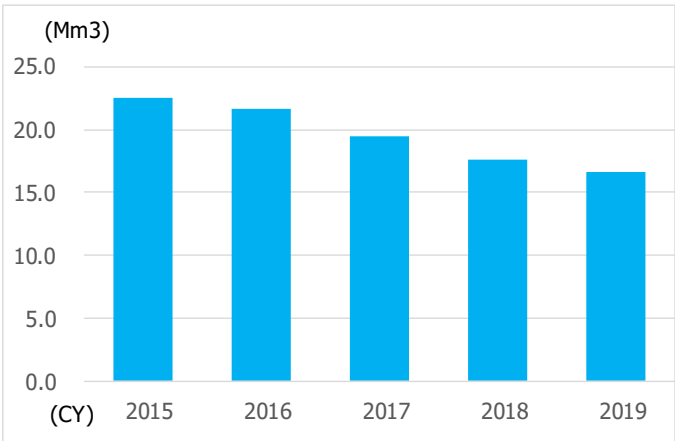
Water

Water utilization and Water management

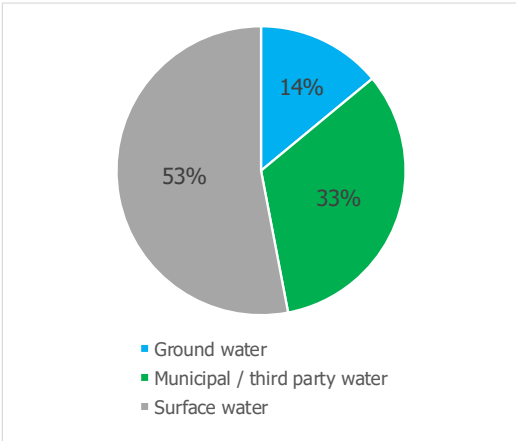
In glass-making, water is used for cooling, and most of our plants operate with closed loop systems and so only require top up. Water is also used for washing glass in plants but there the need is for very high purity, so water is treated and then re-circulated. We seek to minimize our water consumption by working with suppliers to recycle water and to install advanced water treatment facilities. Processes are managed by Manufacturing Excellence's standardisation procedures (eg turn off washer sprays when not needed, use optimal sized nozzles, install water catchers, implement controls to prevent overflows and maintain to prevent leaks, etc). This not only reduces the withdrawal of water itself but also the chemicals used in the treatment of the water. Across the Group, water consumption can vary considerably according to process and product demands as well as water quality. Approximately 2.6m³ are required to manufacture one tonne of float glass and approximately 0.12 cubic meters are required to process each square meter of automotive product.

We withdrew a total of 16.6 million cubic meters of water in 2019.

■ 2015-2019 NSG Group total water withdrawal 2015-2019



■ NSG Group Water withdrawal by source 2019



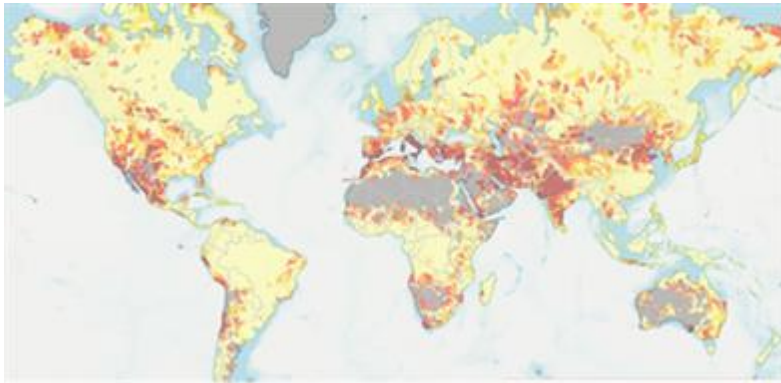
Water risks

We do not have any current stakeholder concerns regarding water scarcity or waste water quality. On the other extreme of water risks, flood planning and prevention strategies have been applied where indicated. Water risks do not register as significant in the NSG Group risk assessment process, however, we will continue to risk assess all facilities. The NSG Group Sustainability Committee is the global forum of the senior management to review the risk and performance and to discuss related activities on water management.

The NSG Group has implemented a new Water Policy to ensure a clear statement of NSG Group's approach to water stewardship and in order to address water quality challenges and the risks of water scarcity in support of the Group Sustainability and Environmental Policies.

In 2019 the NSG Group implemented a new and more sophisticated Environmental Reporting and Analysis database. All sites are reporting their specific information and water data into this central database for further aggregation, analysis and monitoring on corporate and site level. Our 2019 data reporting and reviews highlights that 9 NSG sites are located in water stressed areas in accordance with the global Aqueduct Water Risk Atlas. The water withdrawal at those sites represents 21% of the total. Those sites are subject to prioritized water management reviews and improvement activities.

Water stress map - source: Aqueduct Water Risk Atlas



Water saving Projects

Amongst other good water saving projects, the water project at the Automotive downstream site Versailles, Kentucky won the internal Environmental Award 2018. The project recovers and re-uses water from numerous glass washing machines, resulting in significant savings of >200,000 m³ water per year.



Materials

Responsible sourcing of materials

NSG Group aims to meet the requirement of the UN Sustainable Development Goal 12 to use natural resources sustainably.

Where possible, NSG Group implements circularity measures to prevent the generation of waste and mitigate negative impacts when it is generated. We aim to retain the value of products, components and materials that are circulating in the economy.

Our principal raw materials are mineral in nature, therefore we have a particular obligation to ensure that, in obtaining those minerals, natural habitats and biodiversity are preserved or enhanced.

We will responsibly manage all materials in proportion to their environmental risk and exercise responsible stewardship of those lands for which we are accountable. (from NSG Sustainability Policy)

Before a raw material is approved for use by NSG an auditing process is carried out to ensure the material meets the requirements for its use in glass making and conforms to our ethical sourcing policies. In the case of mined or quarried materials this will involve a site visit to check that the supplier has extraction rights and approvals, including remediation plans, in place.

Regularly monitor, minimise and safely use hazardous chemicals and encourage the re-use and recycling of materials.

Encourage co-operation with our customers and suppliers to facilitate good environmental practices and to promote the efficient use, reuse, recovery and recycling of glass and other materials involved in glass manufacture, processing, packaging, and delivery. (from NSG Environmental Policy)

The principal raw materials used in the manufacture of soda-lime silicate glass are sand, sodium carbonate (synthetic or natural origin), dolomite, limestone, feldspar or nepheline syenite, sodium sulphate, carbon in the form of anthracite or pet coke and cullet. Cullet is crushed glass which originates from various sources including glass manufacture and processing and recovery of used parts. To contribute to our SBT objective, NSG Group will continue working on replacing virgin raw materials with crushed glass cullet.

Flat glass making may also involve use of small amounts of some additives mentioned as materials of concern in the Drive Sustainability Material Report. These include iron (rouge), titania (in both natural and synthetic form), cobalt (in the less hazardous Co₃O₄ form) and ceria where these confer specific optical properties to glass for special applications. NSG uses the minimum feasible amount of these additives and all are sourced ethically as described above.

During the synthesis of glass, all raw materials react together in the furnace at approximately 1,550°C and form a new single constituent substance glass, with the exhaust of gases NO_x, SO_x and CO₂.

Purchase amount in CY2019 (Unit: k tonnes)

Sand	2,200
Soda Ash	720
Dolomite	570
Limestone	153
Good glass bought in	105

The majority of our raw materials are sourced from third party suppliers, however, NSG Group has minority shares in Lochaline Quartz Sand (Scotland), MI Tunisia and ViCo (Vietnam) and wholly owns Melfi sand quarry in Italy. The last of which provides 5% of our Group sand consumption.

Restoration and Biodiversity at the Sand quarry at Melfi, Italy

The NSG Group owns and operates a sand quarry at Melfi, Region Potenza, in Italy. This quarry is located in the mountainous area in the valley of the Ofanto river.

At this open - above ground -mine, sandstone is taken from the ground and crashed down by shredder and milling equipment to produce silica sand for the further melting to glass at another NSG sites in Italy.

Water is taken from the Ofanto river to wash the sand. The water is given back to the river after sedimentation of particles from the washing process. Unwanted natural material from the mining operation as well as the sedimented material from the washing process is then filled into the finished quarry areas for restauration purposes. The restauration areas are then planted with tress and other plants which occur in the local habitat to minimize the impact on biodiversity. The selection of the plants is done in close cooperation with experts from local authorities.



Re-filling and restauration ofthe sand quarry at Melfi



Planted trees at finished areas atthe sand quarry of Melfi



Reduced visual and biodiversity impactafter restauration of finished parts of the sand quarry at Melfi

Smaller quantities of chemicals and materials are used for glass coating, laminating, IGU manufacture, automotive value added components and technical glass.

Our management systems identify hazardous substances and NSG Group engages with suppliers to use less harmful alternatives where possible. R&D actively reformulate products to eliminate hazardous substances eg. we have recently removed nickel as a tinting additive in our glass. Chemicals are not required for the glazing products during their operational use. At the end of its life, all glass sold can be

recycled as cullet if adequately segregated for re-incorporation back into glass.

In 2019, NSG Group implemented new environmental reporting software that will allow all raw materials to be monitored and associated scope 3 CO2 emission to be reported and tracked at site and Group level. Supplier engagement activities will help to measure and ultimately reduce these scope 3 emissions. Wherever possible, our raw materials are locally sourced to reduce transport emissions.

Materials for packaging purposes

In Europe, much of our glass is transported on steel stillages - in cycles with the customers – without packaging and utilizing specialist 'Floatliner' vehicles for the large raw glass plates. We use a significant quantity of renewable wooden packaging in our operations and work with our suppliers to design reusable units. Due diligence is carried out to ensure that timber comes from legal and sustainable sources.

Polymeric beads are used as interleavants to protect the glass from scratching during transport between industrial manufacturing sites. Our Procurement and R&D teams are currently engaging with suppliers and universities to develop an alternative protective medium for transport.

Commendation from WWF Japan for biodiversity initiative

NSG Group received the "Business & Biodiversity Katte-ni (Arbitrary) Award" Special Prize (the "Japanese Peeper Prize") from WWF (World Wide Fund for Nature) Japan, an international environmental conservation organization, in 2015. The Awards were instituted to recognize and honor public companies undertaking advanced initiatives in biodiversity from WWF Japan's independent and unique perspective. NSG Group was highly evaluated for requiring CoC certification for its packaging materials.

Reason for commendation is as follows (quoted from WWF Japan press release dated 19 February 2015).

"While packaging materials may be a part of the peripheral area of its business activities, NSG Group classifies wooden packaging as one of the purchase categories to be covered when identifying suppliers that have a potentially high impact on the environment, and requires suppliers to obtain Chain of Custody certification for the wood used for their packaging materials. In comparison with such companies that use wood in their main business field, its absolute usage of wood may be limited. Nevertheless, the requirement for Chain of Custody certification by a user of packaging materials can have a significant impact on packaging materials producers, which is too large to be ignored. For the purpose of establishing a credible certification system, it is essential to have Chain of Custody certification validated throughout the supply chain starting from certification at the origin. NSG Group's initiative is uniquely distinctive among the companies evaluated by WWF."

NSG Group will continue to tackle environmental issues including biodiversity for the future.



Certificate of Commendation is presented from WWF Japan

"Business & Biodiversity Katteni (Arbitrary) Award"

WWF Japan evaluated 1,818 companies listed on the First Section of the Tokyo Stock Exchange from its unique perspective, and nine companies were recognized for their biodiversity undertakings and awarded.

CoC (Chain of Custody) certificate

The program to provide assurances to consumers that wood products originate from sustainably managed forests and managed appropriately throughout the supply chain.

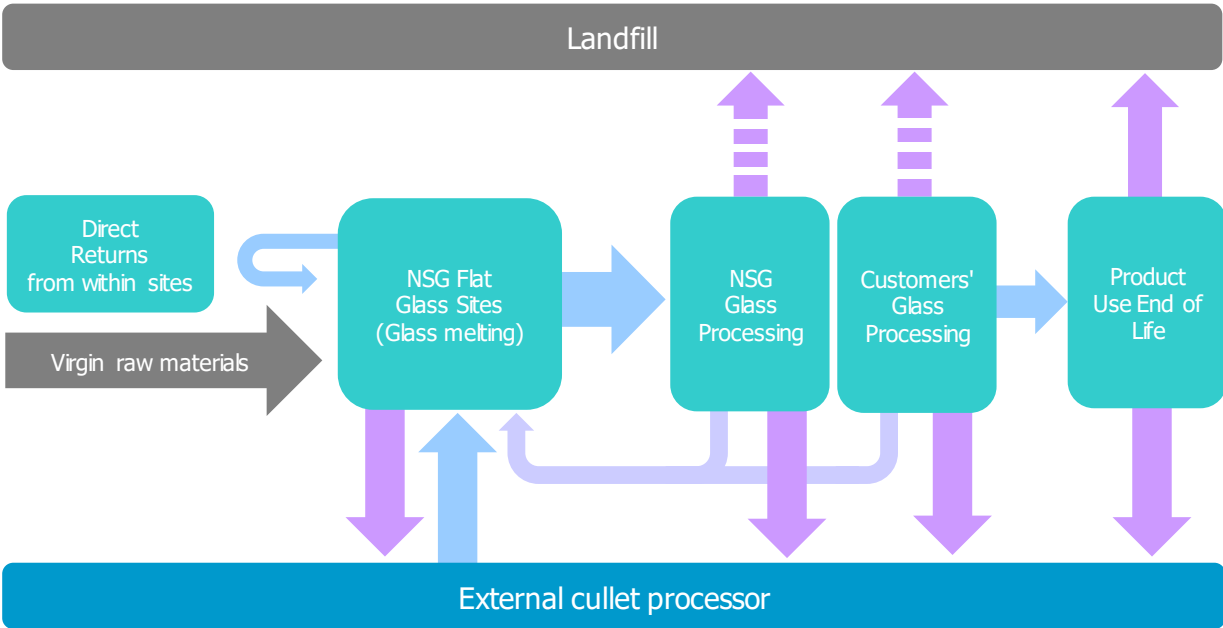
Waste and Circular Economy

The NSG Group is fully committed to reduce adverse environmental impact by maximising the reuse, recycling or recovery of resources and minimising the production of waste involved in glass manufacture, processing, packaging, and delivery.

Re-use and Recycling of Glass

The glass manufacturing process itself produces very little waste material. All trimmed glass from the manufacturing processes of raw float glass plates is reused in the melting process and replaces virgin raw material. Cullet and rejected parts from further glass processing for Automotive or Architectural Glazing parts is reused or recycled at the NSG Group glass melting process or given to external glass recycling partners to be used in other glass melting sectors. Re-melting of glass cullet significantly helps to reduce energy consumption and related CO2 emissions. Remelting of one tonne of cullet avoids approximately 400-600 kg of CO2 emission.

■ Cullet flow



Compiling and monitoring of waste data

In 2019 the NSG Group has implemented a new and more sophisticated Environmental Reporting and Analysis database. All sites are reporting their waste data into this central database for further aggregation, analysis and monitoring on corporate and site level. If not monitored internally (e.g. re-used internal cullet) - the waste quantity data is based on waste transfer notes.

Third party waste management

Where possible, glass cullet from the manufacture of flat glass and downstream glass processing is reused back into the melting process under NSG supervision and management. Pre-consumer waste, either diverted from disposal or directed to disposal, are managed by third parties. All contracts with waste management and recycling partners are arranged with the imperative requirement to meet local environmental legislation and the NSG Group data reporting requirements.

In this regard - and as a pre-condition of the waste-service contract - the waste and recycling contractors are obliged to accept the NSG Group Supplier Code of Conduct and have to maintain certificates of their

environmental and waste management qualification (ISO 14001 or equivalent). Following a risk approach, additional audits were conducted by internal environmental experts in order to determine whether the waste/recycling contractor manages the waste in line with contractual or legislative obligations.

Waste sent to Landfill

In line with the tradition and commitment of the Sumitomo Group of Companies, the NSG Group is setting focus targets to reduce waste to landfill. Thus, because of the potentially significant negative impacts on the environment and human health and because the resources and materials contained in waste that is landfilled are lost to future use, which accelerates their depletion.

In former years the NSG Group reduced the waste sent to landfill by 50 percent up to 2013 versus the selected baseline year 2007 - and again by 16 percent until end of 2019 versus the baseline year 2014. NSG Group set a new Sustainability target to reduce this environmental impact by an additional 20 percent on FY20 by the end of FY2024. A small portion of glass cullet from Glass processing (3.3 kt in 2019 / 3.7 kt in 2018) is sent to landfill because of contamination – which is included in our Sustainability improvement target on waste to landfill and related activities.

Other specific wastes

Grinding sludge

The waste stream from grinding of automotive glass edges and glass drilling cannot be prevented, but we have been actively seeking recycling partners to divert this waste from landfill and provide a raw material for concrete products and other aggregate manufacturers.

Float rejected raw material

In 2019, we continued to seek avoidance and/or recycling opportunities for glass dust and rejected batch – occasional off-specification raw material that often cannot be blended and some sorts of dust collected by the pollution abatement equipment.

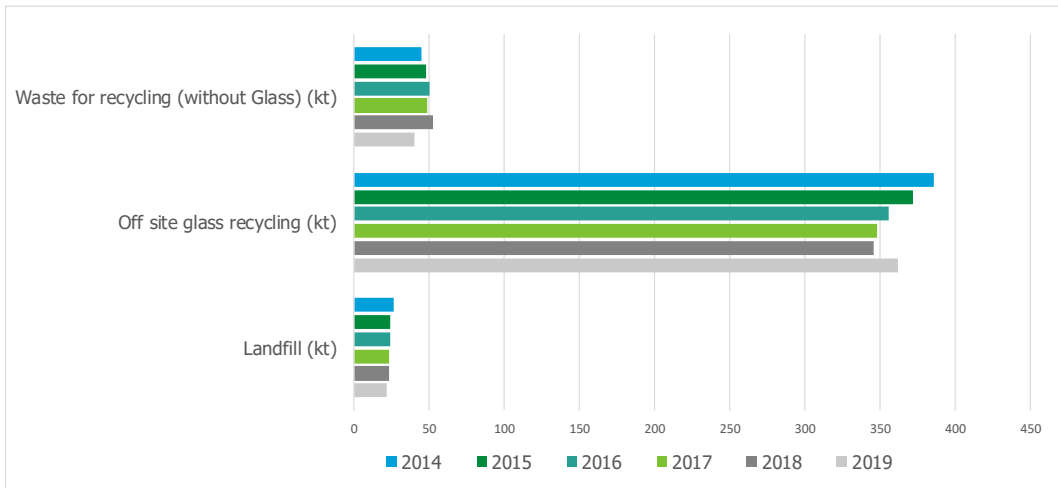
General waste

Focus and support have been given to the highest volume producers to further improve general waste avoidance and segregation. Focus has been given to the avoidance and/or reuse of packaging materials. For the remaining sorts of general waste procurement has been actively involved in finding local recycling partners - rather than sending mixed general waste to landfill or incineration.

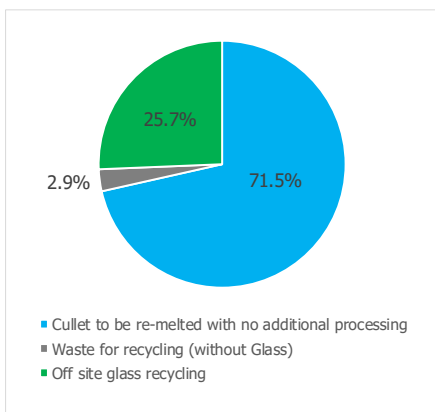
Wastes generated upstream or downstream in the value chain

Post-consumer cullet is not currently used in the flat glass sector because the segregation of the end of life product (car/building/PV panel) does not lead to sufficient quality cullet. Its inert properties mean that it is currently used as an aggregate substitute. It does not emit hazardous chemicals or decompose to emit ghg at the end of life. However, NSG Group is committed to engaging with customers, architects and regulators to improve the circular economy of flat glass and ensure that it is sufficiently well segregated at the end of life to be re-melted as a raw material in the glass sector. The environmental impacts of waste from upstream suppliers is included as part of life cycle analysis studies.

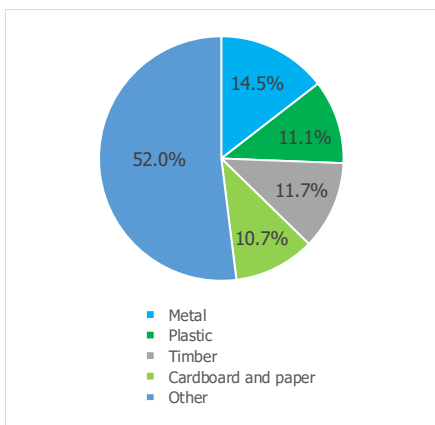
■ NSG Group Waste 2014-2019



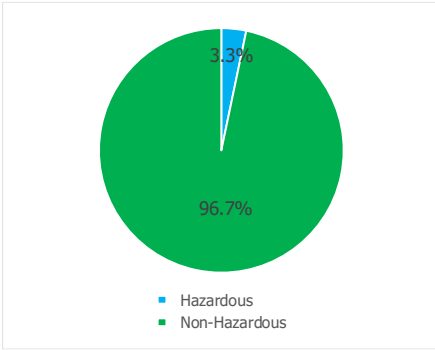
■ NSG Group Materials diverted from Disposal 2019



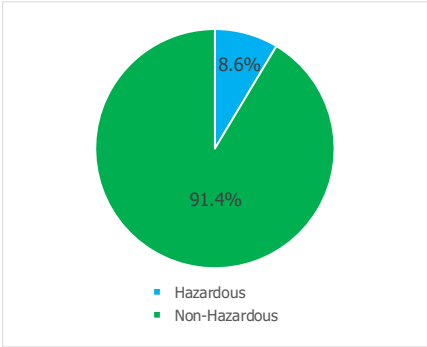
■ NSG Group sorts of waste for recycling (without glass) 2019



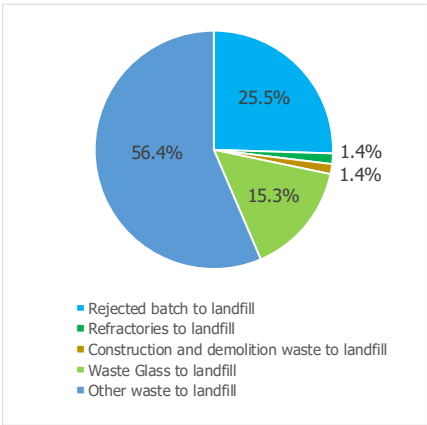
■ NSG Group hazardous/non hazardous waste for recycling (without glass) 2019



■ NSG Group hazardous/non hazardous waste to Landfill (without glass) 2019



■ NSG Group sorts of waste to Landfill (without glass) 2019



Environmental Compliance

Environmental Compliance

Adherence to regulations, including permits, licenses, building deeds and other requirements to which the NSG Group subscribes, is a fundamental condition for the fulfilment of the Sustainability Policy and the Environmental Policy.

Each site establishes and maintains procedures to identify and list all environmental laws, regulations, requirements and rules that apply to their operations.

Site registers for legal and other requirements include the source of a requirement (e. g. law, regulation, agreement or permit), the related environmental aspect of the site, the applicable obligations for the site and the responsibility and/or relevant procedures in place to fulfil the obligations.

Legal & other requirements are tracked - e. g. through a subscription service for all national and regional regulations. Respective changes are reviewed on how this new or changed requirement applies to the organization's environmental aspects. Applicable new or changed requirements are subsequently routed to the relevant level of responsibility in the organization.

Certified Environmental Management Systems to ISO 14001 are implemented at the vast majority of the NSG glass melting and downstream manufacturing operations. This includes frequent internal as well as 3rd party Environmental audits to confirm ongoing effectiveness of the Environmental Management, continuous improvement and Environmental compliance monitoring.



Environmental Audit at an NSG plant

Non-Compliance

Despite the Environmental Compliance controls in place, some cases of Environmental Non-compliance occurred and sanctions were raised by authorities. They are registered as failures in the Environmental Management System and were subject to immediate corrective actions, root cause analysis and implementation of control measures.

	FY2018	FY2019	FY2020
Total monetary value of significant fines [Million Yen - JPYm]	0	1.1	1.5
Total number of non-monetary sanctions	0	0	1.0
Cases brought through dispute resolution mechanisms	0	0	0

Cases of significant fines:

Fine in FY2020 (China - Tianjin site)

Environmental Impact Assessment issue.

Corrective Action: The Environmental Impact Assessment of an additional production line has been conducted and the application process for the operational permit is ongoing.

Fine in FY2020 (China - Tianjin site)

VOC waste gas issue at a production line. VOCs discharged without installation of pollution treatment equipment.

Corrective action: In April 2020, an UV light oxygen catalysis purifier has been installed and put into use.

Fine in FY2019 (USA - Lexington site)

Overdue air permitting renewal application and incorrect/missing air reporting issues.

Corrective action: Air permit renewed and issued. Air reports corrected/completed and filed with authorities. Management of change and training systems at the site improved and implemented.

Certification

ISO 14001 Environmental Management System

We aim to certify our manufacturing facilities to the internationally recognized ISO 14001 environmental management standard and now have 77 certified sites around the world, representing ~ 80 per cent of our business by number of employees. Our Automotive business was one of the first in the automotive industry to achieve a corporate certificate for environmental management. A single ISO 14001 certificate from TUV SUD Management Service GmbH covers group functions and all of our Automotive plants worldwide.

ISO 50001 Energy Management System

We have maintained ISO 50001 certification across all operations in Germany, Italy, Finland and the Automotive engineering function. Investment in sub-metering hardware and software installations allows a high level of transparency in energy consumption and enables a sophisticated energy planning process with improvement activities, target setting and frequent reviews to be established.

Environmental Product Declarations (EPDs)

EPDs allow architects to access environmental information and complete sustainability assessments of buildings. The German Institute of Building and Environment (IBU) awarded EPDs for Pilkington Pyrostop® and Pilkington Pyrodur® fire-resistant glass, according to ISO 14025 and EN 15804. NSG Group has received Japan's first EPD for architectural glass products, including float, insulated glass units, laminated and toughened glass. NSG in the US completed an EPD project with the National Glass Association (NGA). NGA is an industry association for the automotive and architectural glass markets. NGA and its member companies created an industry-average environmental product declaration (EPD) for their flat glass to better understand their glass products' environmental performance.

Suppliers

Suppliers of Safe & High Quality Products & Services

We purchase materials, goods and services from more than 20,000 suppliers worldwide. In support of Group Environmental Social Governance (ESG) goals, Procurement's aim in working with our suppliers is to have alignment with our principles and for them to strive for the same goals we set ourselves. Our policies and procedures are structured to ensure conformity throughout the complete sourcing and supplier management process in order to mitigate risk in our supply base. Managing our suppliers ethically with a high focus on health and safety is fundamental to our way of working. In addition to specific measures and Key Performance Indicators (KPI's) we also assess supplier sustainability in partnership with EcoVadis. Our Supplier Code of Conduct illustrates the key areas included within our drive for a sustainable supply base.

Suppliers

Supplier Code of Conduct

The Code of Conduct outlines these behaviors, processes and procedures — in short, the standards we expect from our suppliers.

We have communicated our Code of Conduct to all current and new suppliers and have already obtained agreement to its provisions from the majority of our key contracted suppliers.



Please see the website for the contents of each item of "Environment", "Society" and "Compliance".

It is the responsibility of all our suppliers to follow the principles of this code. NSG Group asks that all suppliers agree to our Code of Conduct as a pre-requisite for conducting business with us.

The code is available in several languages below:

- | | | | |
|-----------|------------|------------------|------------------|
| •Japanese | •Finnish | •Malay | •Spanish (EU ES) |
| •English | •French | •Norwegian | •Spanish (LA) |
| •Chinese | •German | •Polish | •Swedish |
| •Danish | •Hungarian | •Portuguese (LA) | •Vietnamese |
| •Dutch | •Italian | •Romanian | |

* The Code is updated periodically to accommodate changes in legislation. The most recent updates include money laundering, modern slavery, human trafficking and Conflict Minerals.

Code of Conduct Key Areas :

Anti-Slavery & Child Labour

All NSG suppliers must conform to the relevant International Labour Organisation Labour Standards as a minimum. NSG will not engage with suppliers who apply or support forced labour or employ young people under the age of 15 or older if defined by law.

We employ the following strategies as part of our due diligence against slavery and trafficking in our supply chain:

- Defining our expectations in the SCoC

- Assessing suppliers in conjunction with EcoVadis
- Supplier Audits

A hotline is available to all NSG Group employees and third parties for reporting of suspected violations of human rights. Reporters may be anonymous in most countries and all reporters are protected from retaliation in any form.

Conflict Minerals

NSG Group supports the goals and objectives of the Dodd-Frank Wall Street Reform and Consumer Protection Act's Section 1502, which aims to prevent the use of conflict minerals that directly or indirectly finance or benefit armed groups in The Democratic Republic of the Congo (DRC) or an adjoining country as defined in the Act.

Identifying suppliers who provide materials that could potentially include these minerals is a very important part of our procedures and due diligence is regularly completed via an online questionnaire.

Anti-Bribery Anti-Corruption (ABAC)

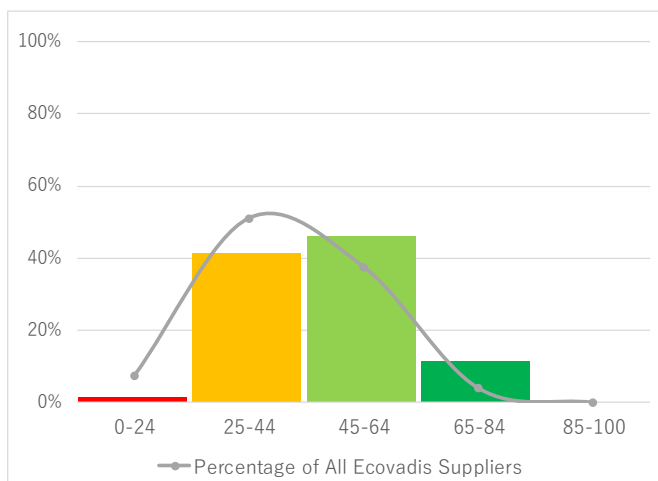
NSG Group and its subsidiaries do business with a range of persons and entities in the private sector including, but not limited to, agents, consultants, distributors, service providers, freight forwarders and customs clearance agents (collectively, "Third-Parties"). We continually review our suppliers in order to identify those considered to be a high ABAC risk. The NSG Group Ethics and Compliance function carries out due diligence that includes a questionnaire and screening process. The Third-Party may be screened against various lists including sanctions lists, watch lists, PEP (politically exposed persons' lists) and checked for exposure in adverse media.

Supplier Development

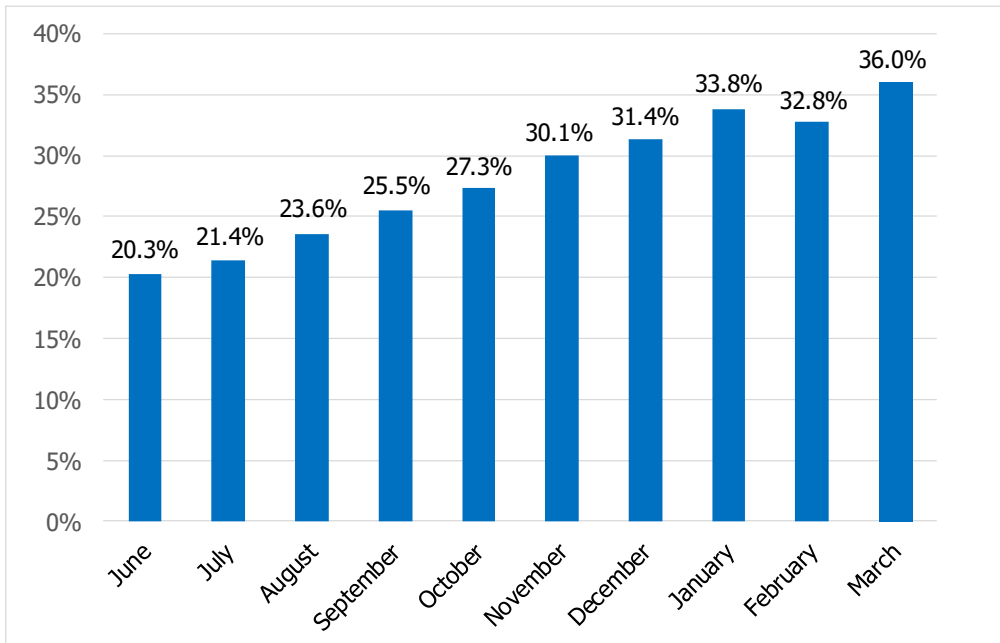
Measuring the performance of our suppliers against Key Performance Indicators (KPI's) we strive to continually improve the sustainability of our supply base. Increasing the coverage of CSR assessments through our partner EcoVadis and engaging with suppliers through Improvement Action Plans we strive to shape and improve our supply base in the areas of Environment, Labour & Human Rights, Ethics & Sustainable Procurement. Good progress with EcoVadis assessments can be seen on the Non Financial Highlights section. This progress was recognised by EcoVadis with an award during their 2020 annual conference.

NSG suppliers average score of 47.85 exceeds EcoVadis average for all companies measured;-

■ Overall Score Distribution

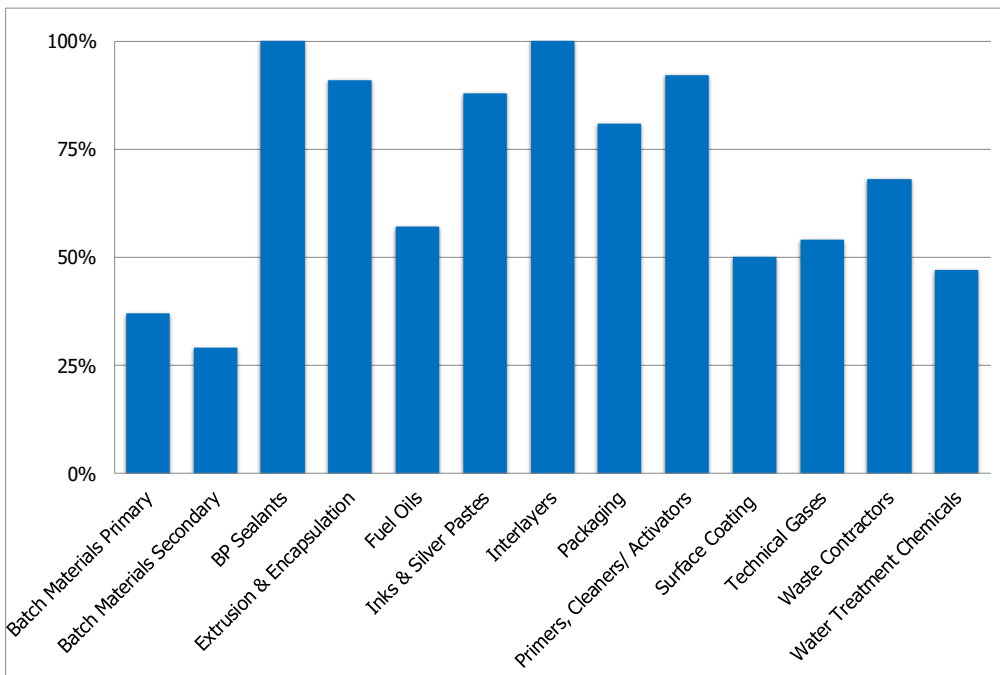


■ FY20 Supplier Spend Assessed by EcoVadis (% Annual Spend)



We pay particular attention to suppliers who potentially have a High Environmental Impact (HEI). Our aim is to ensure that these suppliers minimize their potentially negative impacts and work positively on environmental initiatives. 13 of our material categories, see chart below, fall within the scope of HEI, including wooden packaging, batch materials, waste management, contractors and chemicals. We expect that all suppliers in these categories have internationally recognized environmental certification such as ISO14001 or national equivalent and/or EcoVadis assessment. In the case of wooden packaging, paper and cardboard, we look for a recognized chain of custody (e.g. FSC or PEFC) in regard to the raw material supply.

■ HEI Compliance - FY20



Suppliers

Examples of Supplier Engagement in 2019

Energy Efficiency and CO2 Reduction

For more than eight years, NSG Group has been implementing a globally co-ordinated and supported energy efficiency program across its operations. Procurement together with other central resources from Research and Development, Manufacturing Excellence and local management teams are focused on reducing our energy consumption and costs across the entire Group. In October 2019, in alignment with the Paris Climate Change Agreement, NSG Group committed to Science Based Targets (SBT) to reduce absolute Scope 1 and 2 CO2 emissions from glass manufacture by 21% of CY2018 baseline levels by 2030.

In addition to Scope 1 and 2, NSG Group is also committed to reducing its Scope 3 CO2 emissions. Scope 3 emissions include other CO2 emissions in NSG's value chain, for example, raw materials, transportation, services, business travel, employee commuting, emission by our JV investments and certain emissions by our customers in the processing of our glass.

Scope 3 CO2 emissions (tonnes)	
Category	CDP 2019 response
Purchased Goods & Services	962,579
Processing of sold products	600,000
Fuel & Energy related materials	546,594
Investments	200,000
Downstream transportation & Distribution	145,241
Employee Commuting	9,955
Upstream transportation & Distribution	6,017
Capital goods	4,174

In 2017, NSG Group started the process to improve the quantification of its Scope 3 emissions. The 2019 Scope 3 emissions can be seen in the table above. We also started an engagement with key suppliers to better understand the CO2 in our supply chain and to identify and share best practices with our partners.

Synergies With Strategic Raw Material Suppliers

Batch raw materials (dolomite, limestone and soda ash) represent 0.8 million tonnes or 33% of total Scope 3 emissions.

We are working with a number of strategic suppliers on projects to reduce CO2 emissions and at the same time reduce energy consumption. In summer 2019 discussions commenced with a strategic soda ash supplier to the Group. Soda ash acts as a fluxing agent during glass manufacture playing a vital role in reducing the furnace temperature necessary to melt silica and therefore reducing the energy required. However, the production of soda ash also releases a significant portion of CO2 into the atmosphere. NSG and the supplier are evaluating potential synergies between our two high energy demanding - and hence high CO2 emitting - companies.

Low carbon raw materials

Manufacture, processing and transport of raw materials (Scope 3) contributes slightly more CO2 emission so reduction of the raw materials CO2 burden is very important to achieving our SBT. R&D, in collaboration with Procurement, have been working to find viable low carbon batch materials that can be used to reduce these emissions and recently conducted trials of a calcined carbonate raw material, which contains no CO2. There are numerous technical issues to overcome but further trials are being planned to fully assess and mitigate risks identified.

The project has recently been expanded to look at alternative low carbon materials which due to their risks, cost and/or availability, have never seriously been considered before by NSG Group. The work will require closer collaboration with our existing suppliers, developing relationships with new types of suppliers and a great deal of research to improve NSG Group's technical knowledge of the new materials, including how they are produced and their behaviour in our processes. There are significant hurdles to overcome and it may not be possible to implement low carbon materials on all sites and all products but, like increased cullet usage, low carbon materials could, potentially, contribute to achieving around 1/3 of our SBT CO2 reduction.

Suppliers

Contracts with Suppliers

NSG Group seeks to have a clear and mutually beneficial trading relationship with its suppliers of goods and services. This is best achieved by agreeing appropriate contracts with all our suppliers of goods and services. All supplier contracts must be approved internally within NSG Group by the appropriate management before the agreement can be formalised with suppliers.

NSG Group and its Affiliates (as defined in the versions of PCP2 below) will ensure that contractual relations with our suppliers are governed by the most appropriate Terms and Conditions of purchase. For most suppliers this is in the form of our standard Terms and Conditions of purchase (PCP2 issued 2008).

The master version of PCP2 will be the English version. For the convenience of our suppliers in other countries we have translated PCP2 into a number of other languages however suppliers are reminded that, and any disputes will refer to the English version of PCP2.

Various language versions of PCP2 (as follows) are posted on the homepage.

Terms and Conditions of purchase (EU, India, Malaysia & Russia)

- English
- Czech
- Dutch
- French
- German
- India (English language)
- Italian
- Japanese
- Malay
- Polish
- Russian
- Spanish (European)
- Swedish

Terms and Conditions of purchase (North America, Canada & Mexico)

- English
- Spanish (Mexican)

Terms and Conditions of purchase (Brazil)

- Portuguese (Brazilian)

Social

We have put great importance in the philosophy of "People are our most important asset". NSG commits to "Respecting others and unleashing their potential" as the first of our six core values under the management philosophy, demonstrated in "Our Vision".

We train and develop our people while respecting their human rights, improving Inclusion & Diversity and keeping them safe from workplace injuries or occupational illness.



Human Resources

Our management philosophy values the health and safety of our employees above all other considerations and we aim to ensure that we provide a working environment that allows our people to reach their full potential and meet our customers' expectations.

Our employees are our most valuable asset

We value people as the most important asset of our Group. Our HR strategy aims to ensure we have the right people and that we maximize our talent management around the world. Safety and quality underpin everything we do, with open communication central to our employment policies.

We operate as an integrated international Group, with a multinational management. We believe that our diverse workforce with its range of nationalities, skills, qualifications and experience is a substantial benefit to our business. Our management style is to put the best person in each job, regardless of nationality or region. Our approach to rewards and retention includes market-based competitive pay and benefits for eligible employees.

We are putting policies in place to attract and retain talent - particularly in emerging markets. We work to create a culture that allows employees the opportunity to work without fear of intimidation, reprisal or harassment. Our systems permit employees to raise any concerns in a confidential and timely manner.

Inclusion and Diversity

Valuing differences in our people

Statement of Intent

In 2017 the Group has published the following Statement of Intent:

Having an Inclusive Culture and Environment:

we give everyone an equal opportunity to contribute to their full potential and harness the richness of ideas.

Having a Diverse Workforce:

any differences in individuals' backgrounds, experiences, preferences and beliefs are recognized, respected and valued for their variety of perspectives.



Inclusion and Diversity

Inclusion & Diversity

Our effort

The NSG Group established a Global I&D Steering Committee with the aim of enhancing inclusion and diversity across the entire group. The Committee comprises 18 members, covering all business units, functions and regions. It works with individual businesses to identify and implement local and global initiatives, identifying areas for improvements and measuring progress. One central focus is to move I&D beyond the Human Resources department and establish it within all thinking.

Taking action

In line with the annual Group and Regional I&D Action Plans, each country or site is implementing the actions. One of the annual implementations at site level is to celebrate the International Women’s Day through various local events.



Another strategic implementation at Group level is the provision of Unconscious Bias Training to all managers across the Group. Unconscious bias occurs as our brains filter information, categorizing people and situations, in order to make quick decisions. Everyone has unconscious bias that is a result of their own cultural environment and accumulated life experiences. Unconscious bias is far more prevalent than conscious prejudice and is often incompatible with our conscious values. All managers across the NSG Group undertake online training to learn what unconscious bias is, how to recognize it in themselves and in others, and how to mitigate the potential impacts.

I&D Newsletters are issued three times a year to inform all Group employees about the latest activities on Inclusion & Diversity within the NSG Group.



Inclusion and Diversity

Inclusive Leadership

Inclusion & Diversity

Inclusive leadership is a set of proactive behaviors that recognize, respect and value individuals with the goal of unleashing their potential. Global I&D Steering Committee members are advocating the Inclusive Leadership behaviours.



"Our organization becomes more inclusive and valuable by respecting differences in our people."
Guido Di Martino, Sustainability Manager for Argentina and Sustainability Coordinator for South America.



"We act with humility, seeking contributions from others in order to compensate for our own acknowledged weaknesses."
Julie Jackson, Group Tax Controller.



"We value the unique contributions that each person brings to the team."
Shirley Sergeant, R&D Director Europe.



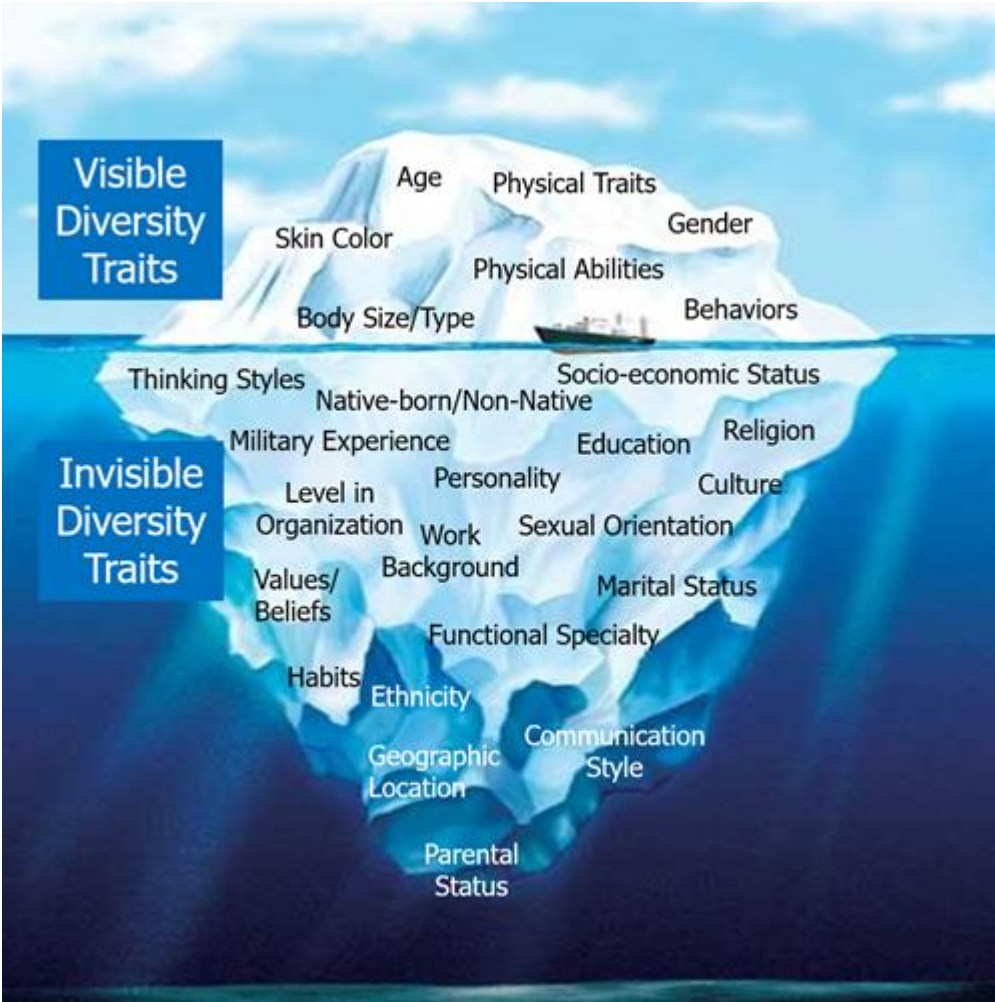
"We encourage an inclusive culture and equality of thought with all employees."
Noline Srougi, Procurement Director North America.

Inclusion and Diversity

Visible & Invisible Diversity

Inclusion & Diversity

When we talk about diversity, we are inclined to highlight “visible” diversity traits such as gender, age and physical abilities. However, there are also a lot of “invisible” diversity traits to acknowledge. Greater diversity brings different points of view, which leads to greater innovation. Our aim is to promote an inclusive working environment where people feel valued for the unique contributions they bring.



Employees

Our management philosophy values the health and safety of our employees above everything else. We aim to provide a working environment that allows our people to reach their full potential and meet our customers' expectations.

Safety, Ethical Leadership, Quality, Customer Focus and Sustainability underpin everything we do, with the principles of trust, mutual respect and open communication being central to our employment policies.

	Group
Permanent Male FTEs	22,038
Permanent Female FTEs	4,104
Total Permanent FTEs	26,142
Temporary Male FTEs	1,880
Temporary Female FTEs	603
Total Temporary FTEs	2,483
Total Male FTEs	23,918
Total Female FTEs	4,707
Total FTEs	28,625
Male Managers FTEs	2,174
Female Managers FTEs	391
Total Managers FTEs	2,565

Data collection at the end of December 2019

Employees

Ethics, Inclusion and Diversity

Our Code of Ethics reflects our Integrity, as articulated in our Core Values, and forms part of the newly introduced "Our Vision". It defines what is expected of all our employees. It particularly emphasises safety, respecting human rights, taking personal ownership for actions and communicating with openness and involvement.

The overriding basis of the Code is that we will carry out our business activities in a safe, professional, legal and ethical manner, and in a way that demonstrates corporate social responsibility and sustainability. For example, one of our key employment standards in the Codes is "We won't engage or support forced labor. We won't employ young people under the age of 15, or older if defined by law". We ensure we have no child labor and no Forced or Compulsory Labor.

The Code acknowledges internationally proclaimed human rights. These are also reflected in our overall employment policies and standards, providing our employees with reassurance on how they will be treated. Our Equal Opportunities and Diversity policy aims to prohibit discrimination based on race, color, religion and beliefs, age, gender, sexual orientation, national origin, disability, union membership, political affiliation, or any other status protected by law.

Global Inclusion and Diversity (I&D) is a key issue for many companies, being widely recognized as enhancing both corporate value and the working lives of employees. NSG Group is firmly committed to further improve its own I&D, embracing the internally and externally declared Statement of Intent and one of our Core Values, "Respect Others and Unleash their Potential".

Inclusion and Diversity (I&D) actions for 2019 have largely focused on building increased awareness of I&D and further developing our activities across the Group. Each Strategic Business Unit and Function have made progress on their own local and regional action plans, and these have been reviewed by Senior Leaders on a quarterly basis at our senior management meetings. All of our Managers have now completed Unconscious Bias training.

Centrally, the Global I&D Steering Committee has designed a special logo which is being used on all of our I&D Communications. Newsletters have been produced on a regular basis which have promoted the activities which have taken place, including recognition of International Women's Day and International Day of People with Disabilities, and concepts such as the importance of inclusive leadership have also been covered.

Our Employee Resource Group Guidelines have been drafted, and during 2020-2024 we are working on implementing a range of development programmes to promote increased female leadership in the organization. There has also been a review of recruitment practices across the Group to ensure all of our activities during 2020-2024 are fair and inclusive.

Employees

NSG Group Talent Management

During 2019, as part of our wider Talent Strategy supporting the Group's Vision and Values, we continued to expand the use of our Talent Management system, which involved the introduction of our NSG Behavioural Competency model to the Performance Review discussion. Integrating our NSG Competency Model globally across our core people processes continues to support and drive culture change.

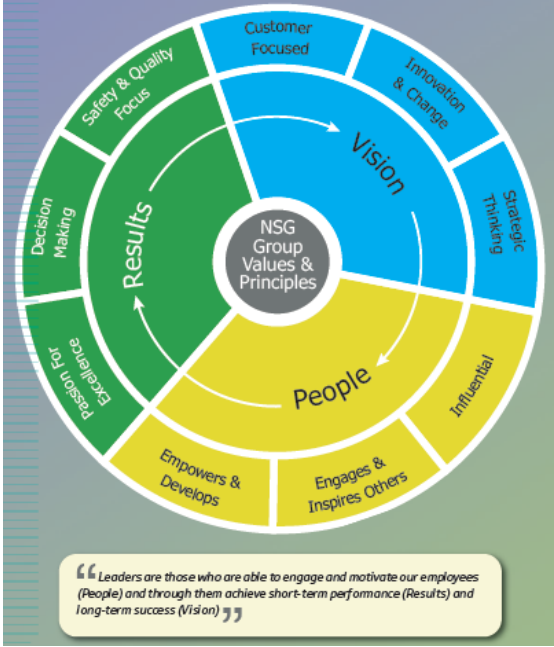
We have also continued to encourage ownership of talent processes by our managers by providing 'Co-ownership' of Succession Plans via our Talent Management system, continuing to deliver a more transparent and dynamic approach to Talent Management.

During 2020-2024 our goal is to embed the knowledge and application of talent practices into every day management life, encouraging a feedback culture across the Group. We will do this by developing a more inclusive and flexible approach to learning and development practices. This will include embracing technology for a greater level of 'blended, virtual' learning options. Our plan includes the transition of our Group programs from face to face learning events to an appropriate mix of virtual class rooms, action learning sets and face to face development activities.

■ Talent Management-Strategy



■ NSG Group Competency Model



Employees

Employee Engagement

We continue to use our Employee Survey to measure sustainable engagement within the Group. In 2019, the survey covered 17 countries in four regions (Europe, Asia, South and North America), and involved 6,989 employees, achieving a response rate of 88 per cent. It was open for completion for three weeks and generated more than 2,645 comments, which were reviewed by the local management. As a result of the review action plans were developed and executed.

Pulse Survey 2019



The Pulse Employee Survey was accessible to 6,989 NSG Group employees in 17 countries across 4 region and available in 12 languages



The questionnaire consisted of 30 `core' questions (5 new this year) and then 49 tailored `supplementary' questions (across 13 locations)



The survey was open between 23rd September - 11th October 2019



166 online results reports generated



The open questions received more than 2,645 comments



Overall response rate remains high at 88%, with 6,153 people taking part

Gender Pay Gap Reporting

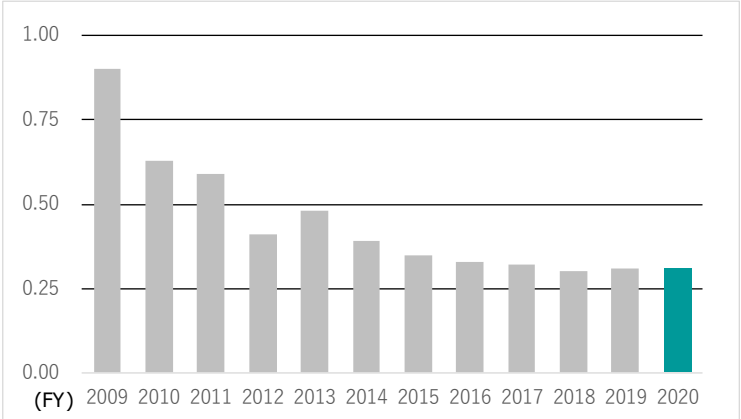
Under the UK Governments new Gender Pay Gap regulations, UK companies must publish the Gender Pay Gap for all legal entities within the UK that employ more than 250 people. This report covers the snapshot data from 5 April 2018.

Health and Safety

Our safety programs emphasize the importance of our vision and values, that people are our most important asset and the safety of our employees and the communities in which we operate is a core part of our ethical business philosophy.

Significant Injury Rate (SIR)

■ Significant Injury rate (SIR)



■ Percentage Significant Injuries (%)

(FY)	2015	2016	2017	2018	2019	2020
Glass handling	30	30	38	45	29	34
Manual work	23	19	21	24	35	27
Slips/trips/falls	11	22	14	10	16	7
Engineering	14	0	0	0	0	0
Machinery	5	16	13	6	6	5
Blade	7	5	5	2	6	7
Fall from height	0	3	4	8	2	15
Others	10	5	5	5	6	5

Safety organization and strategy

The NSG Group Sustainability Director reports to the Chief Operating Officer.

Monthly safety updates are provided to the COO while more in-depth management reviews are completed every six months with the senior operations team comprising the heads of the four SBUs and the heads of the Group functions. These reviews were held by round table in March and October 2019, and March 2020.

All injuries at work are regarded as avoidable. We require full reporting of all incidents, no matter how minor, and appropriate investigation to ensure we learn from all such events. The Group has a focused site approach that provides additional support and more regular reviews for sites that have more than a defined number of significant injuries.

Safety performance

Safety improvement has been developed to focus on three main areas: leadership, specifically our first line leaders; managing our high risk activities and understanding the behaviors that lead to injuries. NSG Group drives proactive safety through a measure called NABIS (NSG Anzen Bunka Improvement Strategy) this process has three main areas reflecting our focus points.

Leadership

Asking our leaders at all levels of the business to show visible and demonstrated leadership, through discussion and spending more time in our production areas talking to leaders and teams about improvements using systems such as GEMBA walks. More recently the GEMBA process now includes Covid 19 reviews using the GEMBA principles.

We continue to ensure all our leaders assess themselves against our 10 key leadership behaviors, asking them to lead by example and to review their teams against a set of principles, such as never walking past an unsafe act without talking to the individual.

Responsibility and accountability of the leaders are to ensure that people follow the procedures and safety rules for the tasks we ask them to complete. This area continues to ask leaders to consistently review the ability of their colleagues to competently complete the tasks. Improving the way in which we communicate safety through regular opportunities for two-way briefings and more formal safety meetings with employees and their representatives is an important way of providing clear information on both reactive and proactive safety initiatives; this area has posed challenges during the CoVid19 pandemic however teams have continued to find innovative ways to communicate with remote teams and social distancing rules are in place for teams attending sites. Leadership teams are required to ensure this communication process is effective. Training our colleagues is a fundamental part of delivering our services to our customers. Ensuring our employees have the tools and ability to deliver our commitments in a safe and ethical manner requires a continual review and update on training needs and competences. Leaders are required through NABIS to ensure that, from a safety point of view, people have the correct knowledge to complete this task.

Asking people to become proactively involved in safety in our plants is part of the leader's responsibility and in NABIS we ask our leadership teams to look for opportunities to involve teams and individuals in safety projects, with the implementation of suggestion schemes and participation in Kaizen processes across many of our larger manufacturing plant being a part of this process.

The second part of NABIS is measuring Safety 4 Ways, which includes:

- Safety Improvement Plans (SIP) - reducing hazards and risks through planned improvements of conditions and behaviors that lead to incidents.
- Incidents of High Potential Severity (IHPS) - reviewing all incidents with a critical eye, asking what could have happened and could the incident have led to a serious injury or fatality; then taking preventative actions.
- Key Safety Behaviors (KSB) - focus on how our employees complete tasks, working to reduce at-risk behaviors through frequent feedback.
- Significant Incident Rate (SIR) - The Significant Injury Rate (SIR) is our primary reactive indicator.

The SIR records injuries requiring medical treatment or the reallocation of duties to allow an individual to continue working, expressed as a rate per 200,000 hours worked. The Significant Injury Rate for the year to March 31 2020 remained at 0.31.

Finally, NABIS requires our leadership teams to manage our high-risk activities.

We are committed to our high-risk reduction program and the safety tools we have in place. We continue to focus on the following areas:

- Working where there is a risk of falling
- Vehicle and pedestrian safety
- Machinery safety: guarding, frequent access and complete isolation
- Contractor control, including permits
- Materials handling: moving glass, load security, grabs, trolleys and pallets
- Driving in connection with work

The Groups commitment to NABIS for larger sites has been reinforced around the globe with a verification process. This ensures EHS professionals within the group review the self assessment scores submitted by the larger operational plants. This process forms part of plant leadership teams performance reviews.

During FY20 the group continued with its planned expansion of the NABIS process into smaller sites and

into its office environments, this process is in place to achieve the overall goal of all NSG employees being involved in a NABIS process.

NABIS for smaller sites: NABIS continues to utilize the headings of the main NABIS tool. However, in the case for NABIS for smaller sites it takes into account the different operational and management requirement of smaller businesses within the group.

NABIS for Offices: This NABIS is for the functional and operational parts of our organization that do not have a standard manufacturing format and focuses on the risks identified by these functional groups and asks leaders to involve their teams in performance improvement relevant to their activities.

Improving our root cause analysis is a fundamental part of the groups improvement strategy, it is only by identification of the underlying causes of accidents and incidents that the group operations will improve in the longer term. To help improve this the group introduced the 5Q process within its significant injury (SI) and incident of high potential severity (HPS) reporting processes. The questions require sites to provide information to SBU regional leadership teams about longer term actions related to the areas.

To further support the the groups drive for improvements in SI and HPS reporting in FY21 the group will replace its global reporting system AIRSWEB with the newest version AVA. This update will enable plants to report issues on the shopfloor, review and discuss possible improvement with employees at the time and record this in a single place. In addition the system will allow action to be more easily tracked to completion. The reporting process on AVA will include the 5Q system described previously.

NSG Group Annual Safety Day

The NSG Group Annual Safety Day took place on October 11, 2019 its main focus across the group was mental health and wellbeing. Plants around the globe delivered information and training to all levels of the organisation in an effort to raise awareness of mental health issue. The group will continue to have its 10th safety day in October 2020. The challenge will be having safety day with our employees whilst ensuring that all CoVid 19 precautions are in place.

Moving safety to the next level

The safety strategy remains the same, with a focus on improving the effectiveness of our safety tools and programs. We believe that our employees and leaders will make the difference in moving safety to the next level through the following initiatives:

- Independent audits of our safety tools to drive a more consistent approach, develop our safety skills and improve our shared learning. These audits were across regions and across sites within a region for maximum impact.
- Further improve our level of proactive employee involvement as a means of continuing to change our safety culture.
- Further develop our first-line supervisors to improve our overall level of safety leadership.

COVID-19

Coronavirus Infection Prevention Measures

NSG Group greatly values the dedication and commitment of the healthcare workers, local communities and governments around the world who work in the front line to contain the virus.

NSG Group's health & safety programs emphasize the importance of Our Vision. Employees are the most important asset for the Group. The health & safety of the employees and the communities in which they live is a core part of our ethical business philosophy. This principle remains unchanged despite the challenges of the Covid-19 pandemic.

Organization and Policy

The Executive team of the NSG Group regularly addresses issues around employees' health and business continuity. The regional and country management teams continuously monitor, develop and implement actions focusing on the health and welfare of the employees, whilst at the same time ensuring the needs of the customers are met.

All employees are strongly encouraged to follow local government advice in relation to country specific actions that are being taken to reduce the spread of the virus.

Main infection control at the Group level

1. Information sharing

- The NSG group utilizes its SharePoint site for sharing best practice between all levels of the business. In addition, the group monitors the number of cases within its regions.

2. Infection prevention

- Regular hand wash with soap and water
- Maintain social distance
- Wear a mask (face covering) or a face shield
- Stay at home if you have symptoms
- Visitor screening to ensure that essential site visitors complete reviews and understand local NSG Group requirements

In addition, regarding the following items, each facility made efforts to implement appropriate measures according to the actual situation.

- Covid-19 risk assessment and control measures to reduce the risk to employees, visitors and contractors attending the plants
- Installation of local controls to segregate and ensure social distancing where required
- Review of working practices to accommodate local social distancing rules
- Increased cleaning regimes especially those of "touch points" and workstations
- Disinfection of workplace should there be an infected individual, thoroughness of quarantine of anyone in close contact
- Limited number of people at each meeting room and canteen, revised layout of desks, tables and chairs
- Improved access to hand washing facilities and hand sanitizers
- Availability of face coverings and, where required, masks or screens between individuals

Examples of the Main infection controls at in each region

1. Europe

- Completion of Covid-19 specific risk assessments at all sites

- Implementation of local government rules
- Consultation with employees and employee representatives
- Communications material for employees
- Regular senior manager reviews of larger operations, together with the relevant plant managers
- Covid-19 updates during business reviews

2. Asia

- Quarantine facility (e.g. shelter) in place in case of a suspected infection
- Covid-19 specific risk assessments and improvement plans
- Local announcements and specific rules based on local government requirements
- Weekly information sharing
- Frequent communication with all sites (weekly)

3. North America

- Senior managers attend daily calls to coordinate pandemic response
- Covid-19 preparation checklist based on CDC (Centers for Disease Control and Prevention) and government guidelines
- Daily calls leading up to site restarts following lockdown
- Installation of monitoring equipment in accordance with local rules

4. South America

- Weekly regional directors' calls in order to coordinate pandemic response
- Weekly Senior Managers calls at each site
- Daily safety and health messages
- Behavioral Observation program with KHB (Key Health Behaviors)
- Completion of Covid-19 specific risk assessments at all sites
- Communications material for all employees

General business actions

1. Travel restrictions (as of 7th July 2020)

- Business travel restricted to business-critical travel only.
- All employees intending to travel to review procedures of the country concerned including country specific quarantine rules.
- All regional travel to be approved by Regional Strategic Business Unit (SBU) Head or Function Head.
- All travel outside of the employee's own region to be approved by the Global SBU or Function Head. All travel by Global SBU or Function Heads to be approved by CEO, COO or CAO.
- When planning any business travel, employees must inform the site that they intend to visit about the planned visit and make sure they are aware of all relevant control measures and requirements at the site. The local site management can reject the intended visit.

2. Remote working

- During the different stages of the pandemic in each region office-based employees have been working from home. Even when they needed to attend their place of work, offices have reviewed the rules as necessary and safety precautions have been implemented so that individuals can return safely.

3. Staggered shifts to reduce mass arrivals and departure staggered shifts ease congestion at entrances and clocking points.

- To reduce congestion when teams enter and exit facilities
- By staggering shift arrivals, the demand on public transport is reduced even in sites like India where we supply the transport. The buses have reduced capacity by COVID safety rules.

4. Remote conferencing

- External and internal meetings held as remote conferences when possible.

- Technically advanced conferencing systems available to enable online meetings.
- Additional access points available for secure remote access to NSG Group's systems
- Standardized screen saver on workstations and laptops to remind employees of prevention measures.

The following posters are available at sites to aid communications:



Communities

We aim to be a good neighbor, wherever we operate. We have around 27,000 permanent employees (as of the end of March 2020), with principal operations in Europe, Japan, North and South America, China and South and South East Asia.

The local communities throughout the world in which NSG Group operates are the foundation of our business and the lives of employees. Without a relationship of mutual benefit with these communities, the Group as a whole could not sustain its operation.

The effects of necessary investments on our communities are generally beneficial, bringing additional employment and economic benefits. For every investment we make, an impact assessment is conducted to ensure we understand and manage the likely effects on the community, the environment and the local economy.

As a responsible and often prominent member of the communities in which we operate, we believe it is important to be involved actively by leveraging our core business and management resources to help to address local issues.

Aims and objectives

We want our operations to function in healthy, thriving communities and to be seen as a good neighbor to those communities. We know that if we want to operate effectively and to be able to expand or change when the time is right, we need the goodwill that comes from being an active supporter of the community.

In addition to our business investments helping to sustain local operations, we also invest in the communities in which we operate.

We aim to help - through direct cash donations to charities and other projects or through in-kind resources - to improve the health of the community or tackle specific social issues. We operate programs that assess and manage the impacts of our operations on communities, including entering, operating and exiting.

We also involve our staff in providing a lead in developing our relationships with the communities in which we operate. This can take the form of matching contributions raised by staff or allowing staff time to make personal contributions of time and effort in local projects.

Activities for Earth Day in North America

In recognition of the 49th Anniversary of Earth Day, NSG Group members at locations throughout North America (all strategic business units in USA, Canada and Mexico) undertook a variety of activities on and around 22nd April 2019. It's purpose was to help ensure a sustainable future through reducing environmental impacts to our air, land and water. The activities also helped to raise the environmental awareness for employees.

Main activities included planting trees or flowers, and distribution of reusable grocery shopping bags and water bottles with NSG logo. Other activities focused on improvements to recycling, waste reduction and cleanup.

Earth Day is an important time to reflect on preservation and enhancement of the environment in which we live and work, and provides an opportunity for us to demonstrate our commitment to a clean and safe environment. NSG Group will continue with these activities in the future.



Planting at Laurinburg



Cleanup at Northwood



Reusable grocery shopping bag

Bike-building in Canada

The employees at NGF Canada, one of the companies of NSG Group, took part in the bike-building competition and turned out ten bikes - together with safety helmets - to be passed on to the local Hope House charity which helps less fortunate people to rebuild their lives. Bike parts were sourced in the form of kits from local suppliers and the employees split into 10 teams to build - and decorate - the bikes. All the participants really empathized with the idea that our bike-building activity will go on to help people in the local community for a long time to come.

At the end of the event, reusable water bottles made by Cupanion, a local company, were distributed to the participants. Every time the user refills the bottle, they scan the barcode with their phone and Cupanion donates the cost of a cup of clean water to the Deliver Life Program in Sub-Saharan Africa. The scheme brings vital refreshment to water-poor communities in Africa as well as to the employees themselves.



NGFC employees drink to a BETTER WORLD

A scheme to distribute reusable water bottles at NGFC in Guelph, Canada, will bring vital refreshment to water-poor communities in Africa as well as to the employees themselves.

The bottles, made by local company Cupanion, come with a barcode (like a QR code). Employees capture the bottle's barcode with their phone and Cupanion donates the cost of a cup of clean water to the Deliver Life Program in Sub-Saharan Africa.

Run by the charity WaterAid, the program focuses on improving water, sanitation and child mortality in the Galla and Hararghe districts of Ethiopia, where only 40% of drinking facilities have clean water, toilets, and soap.

The app has benefits, too: it helps the "green" track their own water consumption.

To make sure they're staying hydrated, Safety and Environmental Coordinator Jenni Hill, shared some more than environmental facts by adding up how many single-use cups are bought that we need to recycle.

Housekeeping and HR's standards at NGFC are also expected to improve. "And if not the waste generated by single-use containers, these bottles reduce the risk of spills and breakages from drinks being knocked over," said General Manager Len Thompson.

"In addition, they are designed to heat or drink hot as well as helping cold drinks cool so they're ideal for our Canadian climate."

FILL IT

SCAN IT

GIVE IT

Tree planting in Argentina

At VASA in Argentina, one of the companies of NSG Group, the employees and their families built composters with recycled wood from our process, and planted native trees on site.

A specialist was invited to the site and taught participants about planting including compost, native tree species and recycling. They learned reforestations techniques, and children also learned about recycling through playing games.

Many trees that were planted are going to be donated to local authorities in order to reforest some green area of the communities.



10th anniversary in Italy

At Primo, NSG Group plant in San Salvo, Italy, 230 employees and their families celebrated 10 years of activity since opening the plant on 16th September in 2019. The plant has been contributing to society through producing heated windshields and wired glass. The plant has been focusing on safety measures and received the Confindustria National Safety Award in 2014.

At the ceremony, the Mayor of San Salvo, Tiziana Magnacca, thanked the top management for choosing this area as site for the Primo plant, and expressed his gratitude to employees and their families for 10 years activities here.

After viewing a video about the production process and conducting a plant tour for deeper understanding of its operation, the cutting of the cake closed the important Open Day anniversary. The plant will continue to contribute to society through the manufacture of glass products.



Local Cleaning Activities in Japan

At all plants (Chiba, Maizuru, Kyoto, Yokkaichi, Tsu, and Tarui) of Nippon Sheet Glass Co., Ltd (NSG) it is considered that connections with and contribution to local communities are important. That is why they have been engaged in local cleanup activities for many years. At Chiba, employees have participated in the "National Route 16 Clean Day" as part of the "Volunteer Support Program" sponsored by local companies and supported by Ichihara City for 17 years. At Maizuru, employees take part in the "Maizuru Clean Campaign" hosted by Maizuru City every year. In addition, employees at Yokkaichi and Tsu have also been involved in activities of the community cleaning day for many years, in which a total of 200 employees participated in 2019. At Tarui, employees have helped cleaning the Aikawa river which is a place of recreation and relaxation for the local community for 38 years.

Each plant of NSG will continue to strengthen ties with local communities and develop with the people in these communities.

Cleaning activity at Chiba/ Maizuru/ Tarui



Chiba



Maizuru



Tarui

Environment Data

■ Air Emissions

		CY2017	CY2018	CY2019
CO2 (Kt)	Scope 1	2,855	3,103	2,970
	Scope 2	896	880	790
	Total	3,750	3,983	3,760
NOx (Kt)		16	17	17
SOx (Kt)		6	6	6

■ CO2 emission (Scope 3)

	CY2019
Purchased Goods & Services	963
Processing of sold products	600
Fuel & Energy related materials	547
Investments	200
Downstream transportation & Distribution	145
Employee Commuting	10
Upstream transportation & Distribution	6
Capital goods	4
Total (Kt)	2,475

■ CO2 reduction per unit of production volume

	FY2018	FY2019	FY2020
CO2 emission (tonne) / equivalent product (tonne)	0.75	0.73	0.74

■ Energy

	CY2017	CY2018	CY2019
Natural gas (TJ)	30,547	32,968	31,877
Heavy fuel oil (TJ)	4,595	4,927	5,764
Electricity (TJ)	7,331	7,478	7,275

■ Water

	CY2017	CY2018	CY2019
Water usage (Mm3)	17.6	17.5	16.6

■ Operational waste to landfill

	CY2017	CY2018	CY2019
Waste glass to landfill	4.5	3.7	3.4
Non-glass waste to landfill	18.6	19.6	18.6
Total (Kt)	23.2	23.3	21.9

■ Recycling

	CY2017	CY2018	CY2019
Recycling (not glass) (Kt)	42.0	48.6	40.5

Human Resources Data

■ Number of employee by gender

		FY2018	FY2019	FY2020
NSG	Male FTEs	1,943	1,979	1,993
	Female FTEs	201	194	197
	Total FTEs	2,144	2,173	2,190
Subsidiaries	Male FTEs	22,493	22,689	21,925
	Female FTEs	4,453	4,538	4,510
	Total FTEs	26,946	27,226	26,435
NSG Group	Male FTEs	24,436	24,668	23,918
	Female FTEs	4,654	4,732	4,707
	Total FTEs	29,090	29,399	28,625

Data collection at the end of December in each year

■ Number of employee by region and gender

		FY2018	FY2019	FY2020
Japan	Male FTEs	4,428	4,431	4,252
	Female FTEs	818	839	829
	Total FTEs	5,246	5,270	5,081
Asia	Male FTEs	2,784	2,834	2,963
	Female FTEs	572	583	571
	Total FTEs	3,356	3,417	3,534
Europe	Male FTEs	11,049	11,107	10,696
	Female FTEs	2,132	2,148	2,196
	Total FTEs	13,181	13,254	12,892
North America	Male FTEs	3,530	3,625	3,495
	Female FTEs	914	928	847
	Total FTEs	4,444	4,553	4,342
South America	Male FTEs	2,645	2,671	2,512
	Female FTEs	219	234	264
	Total FTEs	2,864	2,905	2,776
NSG Group	Male FTEs	24,436	24,668	23,918
	Female FTEs	4,654	4,732	4,707
	Total FTEs	29,090	29,399	28,625

Data collection at the end of December in each year

■ Number of employee by gender and employment contract

			FY2018	FY2019	FY2020
NSG Group	Male	Permanent employees FTEs	22,234	22,482	22,038
		Temporary employees FTEs	2,202	2,186	1,880
		Total FTEs	24,436	24,668	23,918
	Female	Permanent employees FTEs	4,016	4,089	4,104
		Temporary employees FTEs	638	643	603
		Total FTEs	4,654	4,732	4,707
	Total	Permanent employees FTEs	26,250	26,571	26,142
		Temporary employees FTEs	2,840	2,829	2,483
		Total FTEs	29,090	29,399	28,625

Data collection at the end of December in each year

■ Number of employee by region and employment contract

		FY2018	FY2019	FY2020
Japan	Permanent employees FTEs	4,354	4,407	4,252
	Temporary employees FTEs	892	863	829
	Total FTEs	5,246	5,270	5,081
Asia	Permanent employees FTEs	3,006	2,937	3,082
	Temporary employees FTEs	350	480	452
	Total FTEs	3,356	3,417	3,534
Europe	Permanent employees FTEs	11,839	11,931	11,796
	Temporary employees FTEs	1,342	1,324	1,097
	Total FTEs	13,181	13,254	12,892
North America	Permanent employees FTEs	4,249	4,431	4,285
	Temporary employees FTEs	195	122	57
	Total FTEs	4,444	4,553	4,342
South America	Permanent employees FTEs	2,803	2,865	2,728
	Temporary employees FTEs	61	40	48
	Total FTEs	2,864	2,905	2,776
NSG Group	Permanent employees FTEs	26,250	26,571	26,142
	Temporary employees FTEs	2,840	2,829	2,483
	Total FTEs	29,090	29,399	28,625

Data collection at the end of December in each year

■ Number of new permanent employees

			FY2018	FY2019	FY2020
NSG	New graduates recruitment	Male	18	20	28
		Female	3	3	6
		Total	21	23	34
	Mid-career recruitment	Male	28	38	57
		Female	1	4	9
		Total	29	42	66
	Total	Male	46	58	85
		Female	4	7	15
		Total	50	65	100

Data collection from April to March in each year

■ Percentage of new permanent employees

		FY2018	FY2019	FY2020
NSG	New graduates and mid-career	2.2%	2.9%	4.5%

Data collection at the end of March in each year

■ Retention rate of new graduates recruitment

		Male	Female
NSG	Number of new graduates recruitment at 1st April 2017	18	3
	Number of enrolled employees among them at 1st April 2020	15	2
	Retention rate after 3 years	83%	67%

■ Employment rate of permanent employees with disabilities

	FY2018	FY2019	FY2020
NSG and main subsidiaries in Japan	2.0%	2.2%	2.2%

Data collection at the end of March in each year

Main subsidiaries in Japan:

NSG Building Products Co., Ltd., Thanxs Corporation Co.,Ltd., Nippon Sheet Glass WIN-TEC Co., Ltd.

■ Turnover of permanent employees

		FY2018	FY2019	FY2020
NSG	Number of employees leaving	27	34	41
	Turnover rate	1.2%	1.5%	1.8%

Data collection at the end of March in each year

■ Percentage of senior management from the local community

	FY2018	FY2019	FY2020
NSG Group	86.7%	81.3%	80.7%

Data collection at the end of March in each year

■ Percentage of female in managerial positions

	FY2018	FY2019	FY2020
NSG Group	13.1%	12.8%	15.2%

Data collection at the end of December in each year

■ Union Organization Rate

	FY2018	FY2019	FY2020
NSG	70.4%	70.0%	70.6%

Data collection at the end of March in each year

■ Parental leave of permanent employees

			FY2018	FY2019	FY2020
NSG	Number of employees taking parental leave	Male	1	1	1
		Female	5	3	6
		Total	6	4	7
	Return to work rate	Male	100%	100%	100%
		Female	100%	100%	100%
		Total	100%	100%	100%

Data collection from April to March in each year

■ Work-life balance index of permanent employees

		FY2018	FY2019	FY2020
NSG	Acquisition rate of paid holidays	78.5%	83.5%	83.5%
	Annual overtime hours worked per person	172	179	169
	Annual actual working hours per person	1,903	1,902	1,869

Data collection from April to March in each year

[Notes]

- 1) "NSG" in the tables means Nippon Sheet Glass Co., Ltd.
- 2) "FTE" in the tables means Full-Time Equivalent.

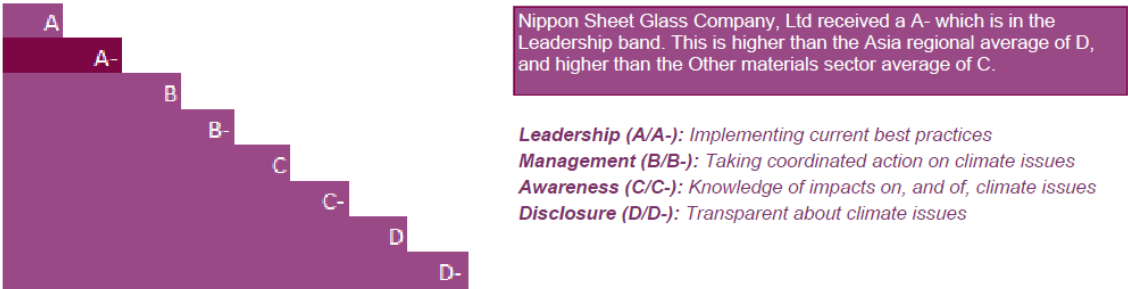
Evaluation by External Party

CDP Rating

Since 2011, NSG Group has participated in annual CDP* Climate Change and Water reporting.

This year, the Group's CDP Climate Change 2020 score improved from previous B management rating to an A- leadership rating. This score improvement recognizes the Group's climate change actions and commitment to transparency. It encourages the Group to continue its ongoing efforts to achieve its 2030 Science Based Targets for CO2 emission reduction.

Rating on Climate Change (Excerpt from the CDP report)



NSG Group's CDP Water 2020 score improved from previous B- to B and demonstrates its progression through the management level rating.

NSG Group uses CDP's global environmental disclosure system to transparently respond to multiple stakeholder requests in a consistent way. CDP reporting allows investors and customers to understand how emerging risks and opportunities on climate change and water security are managed in the value chain and quantify embodied impacts in products.

CDP reporting has guided NSG Group to develop a data driven strategy, prepare for environmental regulation, set challenging Science Based Targets, introduce internal carbon pricing and align to best practice TCFD recommendations.

Annual feedback scores allow NSG Group to track progress and benchmark its environmental performance against the industry peers.



*CDP is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts on climate change, water security and deforestation.

Evaluation by External Party

EcoVadis CSR Rating

EcoVadis operates an independent, external platform allowing companies to assess and benchmark their environmental and social performance on a global basis.

The process assesses company policies, implemented procedures and published reports with regards to environmental, labor practices & human rights, fair business practices and sustainable procurement issues. The assessment is conducted by CSR experts of EcoVadis on the basis of company answers to a survey which is dynamically adapted to country, sector and size, using scorecards covering 150 industry categories and 21 CSR criteria. The rating is based on supporting documentation, public and stakeholder (NGOs, trade unions, press) information.

We used this assessment tool to gain a picture of our CSR performance and to understand areas for improvement. We were rated as Silver regarding our approach to CSR management.



Evaluation by External Party

Evaluation by financial institutions

In 2018, NSG Group has received the highest rating as "especially progressive environmental initiatives" by Development Bank of Japan, Inc. (DBJ) under its "DBJ Environmentally Rated Loan Program". Also, NSG Group scored highly in the "commitment line syndication based on an ESG/SDGs evaluation" arranged by Sumitomo Mitsui Banking Corporation.

Please refer to the news releases.

NSG Receives Highest Mark in Environmentally Rated Loan by Development Bank of Japan
(October 1, 2018)

NSG Received High Scores in the First Commitment Line Syndication based on ESG/SDGs Evaluation by SMBC (November 14, 2018)

In pursuit of our Group mission of "Changing our surroundings, improving our world", we aim to contribute to a sustainable society. This will be done by addressing environmental opportunities and fulfilling our Corporate social responsibilities through proactive actions.

Shareholder Information

Corporate Data (As of March 31, 2020)

Note: Effective as from 1 October 2016, the Company conducted a share consolidation in which every ten common shares were consolidated into one share.

Stock Listing	Tokyo Stock Exchange, 1st section (Code:5202)
Authorized Shares (Note)	177,500,000
Issued Shares (Note)	90,642,499(Common Shares)
Number of shareholders	58,333(Common Shares)
Trading unit of shares	100(Common Shares)
Year end	March 31
Ordinary General Meeting of Shareholders	June (the 154th Shareholder's General meeting held in July)
Record Dates	Ordinary General Meeting of Shareholders: 31 March
	Dividend: 30 September and 31 March
	If there is any other need, a certain day public noticed in advance
Transfer Agent	Sumitomo Mitsui Trust Bank, Limited. Stock Transfer Agency Division 4-1, Marunouchi 1-chome, Chiyoda-ku, Tokyo, Japan
Accounting auditor	Ernst & Young ShinNihon LLC

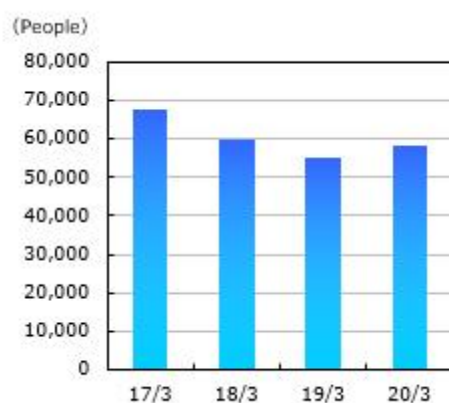
Share ratio in status of shareholders (Common Shares)



		2016 March	2017 March	2018 March	2019 March	2020 March
Financial institutions and securities firms	%	23.3%	22.5%	25.2%	26.8%	25.0%
Other corporations	%	5.0%	4.8%	4.4%	3.4%	4.1%
Foreign investors	%	15.3%	16.9%	22.0%	25.7%	13.7%
Individuals and others	%	56.4%	55.8%	48.4%	44.1%	57.2%

Numbers of shares and shareholders (Common Shares)

Numbers of shareholders



		2016 March	2017 March	2018 March	2019 March	2020 March
Numbers of issued shares excluding own shares	1000units	903,356	90,354	90,473	90,575	90,621
Numbers of shareholders	people	74,089	67,878	59,893	55,359	58,333

Major Shareholders (Common Shares)

	Number of shares (1000units)	Percentage of shares
The Master Trust Bank of Japan, Ltd. (Trust Account)	6,125	6.75
Japan Trustee Services Bank, Ltd. (Trust Account)	3,232	3.56
Japan Trustee Services Bank, Ltd. (Trust Account 5)	1,942	2.14
JUNIPER	1,857	2.04
STATE STREET LONDON CARE OF STATE STREET BANK AND TRUST, BOSTON	1,559	1.72

SSBTC A/C UK LONDON BRANCH CLIENTS – UNITED KINGDOM		
Client stock ownership of Nippon Sheet Glass	1,215	1.34
STATE STREET BANK WEST CLIENT-TREATY 505234	1,099	1.21
Japan Trustee Services Bank, Ltd. (Trust Account 1)	1,008	1.11
Japan Trustee Services Bank, Ltd. (Trust Account 9)	975	1.07
JP. MORGAN BANK LUXEMBOURG S.A. 1300000	926	1.02

Stock indices

Stock indices that include Nippon Sheet Glass Co., Ltd (As of October 1, 2020)

- NIKKEI 225
- TOPIX
- TOPIX Small
- TOPIX 1000
- NIKKEI 500 Stock Average
- S&P/JPX Carbon Efficient Index

Other Related Links

[Annual Consolidated Financial Statements 2020 \[PDF\]](#)

