



NIPPON SHEET GLASS CO., LTD. 153RD FISCAL PERIOD INTERIM REPORT 1 APRIL 2018 - 30 SEPTEMBER 2018



Working together for another century of progress



# MESSAGE FROM THE PRESIDENT AND CEO

On behalf of the NSG Group, I sincerely thank you for your continued support. I am pleased to present the interim report for the period ended 30 September 2018.

# Summary of the First Half-Year of FY2019

NSG Group's revenues and profits in the first two quarters improved from the previous year. Revenues and operating profits increased respectively by 5 percent year-on-year to \(\fomage 308.1\) billion and by 1 percent to \(\fomage 17.9\) billion. Profits attributable to owners of the parent significantly improved by 94 percent to ¥9.3 billion. The market environment remained brisk, particularly in Europe, thanks to which VA (value-added) products including those for solar glass application continue to show expansion. The turnaround of the results, including those of Automotive Glass in Europe and Technical Glass, have more than offset the increased costs of raw materials, etc., and have contributed to the improved results of the first two quarters of FY2019. Taking account of the business results that have continued to progress in line with our plan, the Board of Directors has resolved to pay centennial commemorative dividends (ten yen per share) as interim dividends, as scheduled. We will continue to make efforts to distribute dividends continually, as we adopt the basic policy of profit allocation that we declare dividends in a stable manner, with sustainable business results as the basis. The Board has further resolved to redeem part of the Class A shares. The decision was made, with a view to help funding cost reduction, as well as considering that our profits have been continuously improving and that our current financial condition has become generally stable.

# **Progress in MTP Phase 2**

FY2019 is the second year of our Medium-term Plan, "MTP Phase 2". As we uphold "Shift to VA + Growth" for FY2019, our focus is on: 1) business earning power reinforcement and 2) top-line growth. With respect to 1) business earning power reinforcement, the ratio of



revenue accounted for by VA products shows a steady uptrend, contributing to improve operating profit. As for 2) top-line growth, we decided to construct a new float glass plant in Argentina, an emerging country in South America. South America is a promising glass market whose growth can be continuously anticipated going forward, which will allow NSG Group to further strengthen its established customer base and market positions. Turning to the recent economic trend, there are starting to be concerns over a global economic recession, due to factors including the intensifying US - China trade frictions. We will continue to advance our business. toward increasing the operating profit for six consecutive terms, while we also remain watchful of various risks.

#### Next 100 Years

We marked the centennial of our foundation on 22 November 2018. The Group's senior leaders and employees join me in expressing our gratitude for the understanding and support provided by our shareholders and other stakeholders over many years. The concept for the centennial is "Working together for another century of progress", which expresses our resolution to "create another century of progress" by making use of our strengths in diversified global human resources and working together with our stakeholders from whom invariable supports have been provided since our foundation. Please also check our special website and our official Facebook, which we set up as we started our centennial, commemorative program this April. We took the opportunity of our centennial to define "Our Vision", the new management principles for the Group. Business environments surrounding us are starting to change significantly, along with the globalization and the progress of technology. Holding interviews with senior management and employees worldwide, what I heard was



their voices "wanting to transform the NSG Group". I turned these voices into "MISSION: Core purpose of the company", "ASPIRATION: Desired future position of the company", and "CORE VALUE: The foundation on which NSG Group employees perform work and conduct themselves". The Group's first "Integrated Report" issued this year replaces in its entirety our previous "Sustainability Report" and "Annual Report". The Integrated Report communicates our efforts toward realizing a society in which sustainable growth is secured. While glass manufacturing is a highly energy-consuming industry, the business can help solve social issues, through reducing greenhouse gas emission and mitigating impacts from climate changes as a matter of examples. We are determined to continue to make unremitting efforts as a member of the corporate citizens, in order to build a better world, which is our mission.

December 2018

#### Shiqeki Mori

Representative Executive Officer President and CEO Nippon Sheet Glass Co., Ltd.



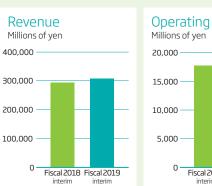


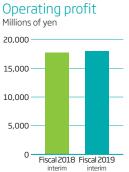
# **CONSOLIDATED FINANCIAL HIGHLIGHTS**

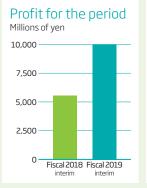
Income statement		Millions of yen
	Fiscal 2019 interim period	Fiscal 2018 interim period
Revenue	308,143	293,997
Operating profit	17,856	17,626
Profit before taxation	13,713	9,229
Profit for the period	9,983	5,547
Profit attributable to owners of the parent	9,261	4,765
Basic earnings per share (yen)	90.16	42.74

Balance sheets		Millions of yen
	30 September 2018	31 March 2018
Non-current assets	532,555	530,838
Current assets	249,047	257,754
Total assets	781,602	788,592
Total liabilities	634,125	644,877
Total equity	147,477	143,715
Total liabilities and equity	781,602	788,592

Statement of cash flows		Millions of yen
	Fiscal 2019 interim period	Fiscal 2018 interim period
Net cash inflows from operating activities	3,092	5,255
Net cash outflows from investing activities	(12,259)	(12,383)
Cash flow before financing activities	(9,167)	(7,128)
Net cash outflow from financing activities	(1,385)	(26,601)
Cash and cash equivalents (net of bank overdrafts) at end of period	50,786	47,778







Net revenue by business	
	Architectural glass
<ul> <li>Architectural Europe</li> </ul>	16%
<ul><li>Architectural Asia</li></ul>	14%
<ul> <li>Architectural Americas</li> </ul>	10%
Automotive Europe	24%
<ul><li>Automotive Asia</li></ul>	11%
<ul><li>Automotive Americas</li></ul>	17%
<ul><li>Technical Glass</li></ul>	8%

Notes: The consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards (IFRS) from the financial year to 31 March 2012. We have adopted IFRS 15 'Revenue from Contracts with Customers' effective from this financial period commencing 1 April 2018. Due to the change in accounting policy, in accordance with IAS 8, we have restated its comparative information in the consolidated financial statements for the cumulative 2nd quarter and full year of the previous period.

Operating profit in the above is defined as being operating profit stated before exceptional items.



# FEATURE STORY: 100 YEARS OF NSG GROUP HISTORY

# America Japan Sheet Glass Company was established

We were established on 22 November 1918, immediately after the end of World War I.

At the turn of the 20<sup>th</sup> century, when Europe was the forerunner of the world's sheet glass manufacture, Libbey Owens Sheet Glass Company (presently Pilkington North America Inc, hereinafter "Libbey Owens") developed the "Colburn Sheet Glass Manufacture Process", clearing the way for machine-based, high-volume production. Yosaburo Sugita, our founder, went to the United States, to successfully conclude a technology introduction contract with Libbey Owens, only a few months after Libbey Owens launched its first product using the manufacture process. NSG then set out to sheet glass manufacture in Japan, using the Colburn process, by the name of "America Japan Sheet Glass Company" in the interest of its relationship with Libbey Owens. NSG changed its name to the current name of Nippon Sheet Glass Co., Ltd. in 1931.

The start was just like those of venture companies today.

1918



At Futajima Plant, our first plant at the current City of Kitakyushu, Fukuoka Prefecture

Ceremony to enter into a contract introducing float glass manufacturing technology

#### Rise of Float Glass

40 years later, in 1958, an innovative glass manufacture technology was invented in the United Kingdom. Pilkington Brothers Limited (presently Pilkington Group Limited; hereinafter, "Pilkington") invented "Float Glass Process", spending as long as seven years and colossal amount of research expenses.

A revolutionary production method which enables production of flat glass with high surface accuracy and consistent thickness by floating molten glass over a bath of molten tin, which is kept perfectly horizontal (float glass). Most of modern architectural and automotive glazing is produced by this Float Glass Process.

This Float Glass Process was introduced to NSG's Maizuru Plant in 1965, as the Process' first implementation in Asia. And only the year next following, NSG developed production technology enabling manufacture of extra thick products through this float process and provided the technology knowhow to Pilkington, and in such a way the two companies has built up trustworthy relationship with each other including through the medium of technology exchanges.

# Three companies are now merged and integrated as one and the same, directed for the next 100 years

Afterwards as the glass industry was headed for a global reorganization, Libbey Owens became the part of the group of Pilkington and then in 2006 Pilkington Group itself was integrated into our Group. As such, among others, with Libbey Owens and Pilkington having joined from the US and the UK respectively, NSG Group embarked on a new chapter as a global enterprise group, whose consolidated revenues and consolidated number of employees were respectively above JPY600 billion and approximately 27,000 persons. On 22 November 2018. NSG reached the centennial of its foundation.



# 100 YEARS OF NSG GROUP HISTORY

#### 1918

America Japan Sheet Glass Company was established



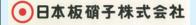
the office building at the time of foundation (which later became the head office)



product label

#### 1931

Company name changed to Nippon Sheet Glass Co., Ltd.



# 1936

Opening of Yokkaichi Plant



#### 1964

Opening of Chiba Plant

#### 1965

Asian-first start of sheet glass production at Maizuru Plant by using float process



Asian-first float glass

# 1968

Opening of the research laboratory in Itami

# 1968

Development of SELFOC™

**1910 1920 1930 1940 1950 1960** 

# 1920

Start of sheet glass production at Futajima Plant (in Fukuoka)





Colburn process machines

#### 1949

Opening of Research Laboratory in Amagasaki

## 1950

Listing of our shares in main stock exchange markets in Japan

#### 1952

Opening of Maizuru Plant



## 1954

Establishment of Nippon Safety Glass Corporation and start to manufacture of automotive safety glass





# 1970

Merging Nippon Safety Glass Corporation and opening of Kyoto and Kawasaki Plants

#### 1971

First overseas investment in Malaysia (Malaysian Sheet Glass Sdn. Bhd.)



Sign to IV agreement

# 1995

Establishment of Joint venture company for architectural glass in Vietnam (Vietnam Float Glass Co., Limited)

# 1997

Development and start to sales of the world's first vacuum glazing Spacia™



#### 1999

Merging Nippon Glass Fiber Co., Ltd. and opening of Tsu Plant



Sign to JV agreement

#### 2018

100th Anniversary, for the next 100 years



# 1975

Launch of Glasscord for timing belts

# 1978

Stable production of Ultra Fine Flat Glass (UFF™)

# 1979

Establishment of Nippon Sheet Glass Foundation for Materials Science and Engineering

#### 1980

Establishment of Sagamihara Works of Kawasaki Plant (currently known as Sagamihara Plant)



#### 2001

Acquiring Pilkington plc. to an affiliated company accounted for by the equity-method

#### 2004

Merging battery separator business of Nippon Muki Co., Ltd. and opening of Tarui Plant

#### 2006

Acquiring Pilkington plc. to a whollyowned company

#### 2008

Change to the Company with Three Committees

# **TOPICS**

# NSG Group to Expand Production Capacity of Coated Glass to Support the Solar Market

We decided this May on a plan to invest a total of approximately JPY 38 billion in the expansion of production capacity of online TCO (transparent conductive oxide) coated glass to support the growing solar market. The investment will fund the upgrade and restart of a float line in Vietnam and the construction of a new glass production facility in Ohio, US over the next three years through FY2021.

NSG Group has concluded a long-term supply agreement with First Solar, the world's leading provider of comprehensive photovoltaic (PV) solar systems. Global solar demand is expected to see a double-digit increase every year in the next three years and First Solar is expanding its production capacity for Series 6, the latest thin film module system with higher efficiency and energy yield. With the TCO glass production increase and expanded supply capability for VA (value-added) products, such as solar glass and other products, we intend to drive our growth strategy while supporting the increased use of renewable energy.



# NSG Receives Highest Mark in Environmentally Rated Loan

We have received the highest rating by Development Bank of Japan, Inc. (DBJ) in their environmentally rated loan program as the company addressing "especially progressive environmental initiatives".

The relevant loan program is a loan program utilizing a screening (rating) system developed by DBJ that evaluates enterprises on the level of their environmental management and then sets financial conditions based on these evaluations. This was the world's first incorporation of environmental ratings in financing menus. For its sustainability initiative, NSG has received a high evaluation, in particular on the following three aspects:

- 1. NSG practices sound and sophisticated environmental management, facilitating sustainability initiatives toward the realization of sustainable society, particularly through its VA products and supply-chain handling.
- 2. As a global leader in the field of innovative glass products with technically-advanced functionality, NSG combines its management strategy with sustainability initiatives.
- 3. With the first publication of its Integrated Report this year, NSG proactively provides external stakeholders with easily-accessible information about its value creation and social/environmental sustainability programs.





# NSG's VA products helping enhance driving safety functions

Customers' expanding needs generated by the rapidly advancing technology for driving assistance systems, such as head-up display (HUD) and advanced active safety package for preventing accidents, are continuing to expand on a global level. In Japan, our anti-fog glass was featured in new Toyota Sienta models with Toyota Safety Sense launched this September. This glass has the anti-fog coating film developed by our hybrid coating technology of organic and inorganic material and is expected to keep the windshield clear for the camera installed for effectively recognizing pedestrians, vehicles or others even under winter seasons or rainy seasons.

In North America, NSG Group's windshield HUD technology was featured in the all-new 2019 GMC Sierra and 2019 Chevrolet Silverado models this August. NSG Group's VA products and services have received high evaluation, as NSG Group was named a General Motors Supplier of the Year this April. This is the second time NSG Group has received the award since the program

began in 1992. Being the only global glass company recognized among the top one percent of GM's global supplier base was a real honor.







Sierra

Toyota Sienta (Photo by Toyota Motor Corporation)

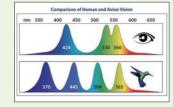
# VA Glass Used Here, Too. Pilkington AviSafe™ visible also to birds.

It is not only humans that NSG Group's VA glass benefits. Birds in flight are unable to use visual signals such as window frames to distinguish the location of glass. The reflection of the sky and other buildings is deceptive and can result in a bird collision. It was the result of a collaboration between the R&D teams in both Lathom, UK, and Northwood, US, who had worked together to develop a glass technology that prevents bird collisions by using a patterned coating with enhanced ultraviolet (UV) reflection.

Unlike humans, birds are able to see light in the UV spectrum. The use of a patterned coating

with enhanced UV reflection makes the glass more visible to birds while remaining aesthetically appealing and less visible to humans.

NSG Group will continue to work towards the realization of sustainable society by providing VA products in every area: architecture glass, automotive glass and technical glass.







inside

outside

### **CORPORATE DATA** (as at 30 September 2018)

Company name Nippon Sheet Glass Co., Ltd.

Head office Sumitomo Fudosan Mita Twin Building

> West Wing, 5-27, Mita 3-chome, Minato-ku, Tokyo 108-6321 Japan

Tel: +81-3-5443-9500

Established 22 November 1918

**Number of permanent** 26,884 (consolidated)

employees

Paid-in capital IPY 116,556 million

Stock listing Tokyo (Code: 5202)

Contact http://www.nsq.com/en/contact-us

#### MANAGEMENT (as at 30 September 2018)

NSG Group adopts a Company with Three Committees structure.

#### **Board of Directors**

External Director,

External Director

Günter Zorn Chairman of the Board

Toshikuni Yamazaki

External Director Yasuyuki Kimoto

**External Director** Masatoshi Matsuzaki

External Director Yuji Takei

Director Shiqeki Mori

Director Clemens Miller

Kenichi Morooka Director

Nomination Committee Audit Committee Compensation Committee \*Chairman

Günter Zorn

Toshikuni Yamazaki.

Yasuyuki Kimoto

4 Masatoshi Matsuzaki

5 Yuji Takei

6 Shiqeki Mori

Clemens Miller

8 Kenichi Morooka



## **Executive Officers**

Representative Executive Officer President and CEO

Representative Executive Officer Executive Vice President and COO

Representative Executive Officer Executive Vice President and CFO

Shiqeki Mori

Clemens Miller

Kenichi Morooka

**Executive Officer** 

**Executive Officer Executive Officer Executive Officer** 

**Executive Officer Executive Officer** 

**Executive Officer** 

Executive Officer

Shirley Anderson

Tony Fradgley Koichi Hiyoshi

Satoshi Ishino Hiroshi Kishimoto

Hiroshi Nishikawa Jochen Settelmayer

Phil Wilkinson



# **OUR GLOBAL OPERATIONS**



# Number of shares/shareholders

Authorized Number of Shares to be Issued		177,500,000 shares
Authorized Number of	Common Shares	177,500,000 shares
Shares to be Issued by Class	Class A Shares	40,000 shares
Issued Shares	Common Shares	90,506,099 shares
	Class A Shares	40,000 shares
Number of Shareholders	Common Shares	54,590
	Class A Shares	3

# Distribution of NSG Group Shareholders (Common Share)



# **Major Shareholders**

Shareholders	Number of Common shares	Percentage of shares
The Master Trust Bank of Japan, Ltd. (Trust Account)	6,625,100	7.31
Japan Trustee Services Bank, Ltd. (Trust Account )	4,202,100	4.64
Japan Trustee Services Bank, Ltd.(Trust Account 5)	1,915,400	2.11
STATE STREET LONDON CARE OF STATE STREET BANK AND TRUST, BOSTON SSBTC A/C UK LONDON BRANCH CLIENTS - UNITED KINGDOM	1,852,500	2.04
JUNIPER	1,671,200	1.84
Japan Trustee Services Bank, Ltd. (Trust Account 2)	1,416,300	1.56
Japan Trustee Services Bank, Ltd. (Trust Account 1)	1,415,800	1.56
JP MORGAN CHASE BANK 385151	1,318,503	1.45
CHASE MANHATTAN BANK GTS CLIENTS ACCOUNT ESCROW	1,282,913	1.41
Client stock ownership of Nippon Sheet Glass Co., Ltd.	1,001,878	1.10

#### SHAREHOLDER INFORMATION

**Fiscal period** 1 April to 31 March of

the following year Held annually in June

Ordinary General Meeting of Shareholders

**Record Dates** Ordinary General Meeting of

Shareholders: 31 March
Dividend: 30 September
and 31 March

**Transfer agent** Sumitomo Mitsui Trust Bank, Limited

4-1, Marunouchi 1-chome, Chiyoda-ku, Tokyo, Japan

**Operating office** Stock Transfer Agency Department,

Sumitomo Mitsui Trust Bank, Limited

4-1, Marunouchi 1-chome, Chiyoda-ku, Tokyo, Japan

Public notice http://www.nsg.com/

**Accounting auditor** Ernst & Young ShinNihon LLC

If you need to record any changes in your address, personal details or any other relevant matter, please contact the securities company administrating your shareholder account.

If you do not use a securities company, please notify our transfer agent as shown below.

# Notice to shareholders holding odd-lot shares

If you hold an odd-lot of shares (1 to 99 shares), which is less than a trading unit of shares (100 shares), you could:

1. sell these shares to the Company, or

2. purchase odd-lot shares from the Company to supplement your holding to the extent necessary to constitute a trading unit.

Please contact the securities company administrating your shareholder account for its specific procedures.

If you do not use a securities company, please contact our transfer agent as shown below.

Mail address Stock Transfer Agency Department,

Sumitomo Mitsui Trust Bank, Limited 8-4, Izumi 2-chome, Suginami-ku,

Tokyo 168-0063, Japan

**Telephone Number** 0120-782-031 (toll free in Japan)

Website

Further information about the Group including its financial results and latest IR information is available at

http://www.nsg.com/en





Please scan this QR code with your smartphone to access our website.



Cover Picture: In 1920, NSG constructed its first plant (called Futajima Plant) in what is now the City of Kitakyushu, Fukuoka Prefecture, and began to produce Japan's first sheet glass using the horizontal sheet process in the Colburn process machines imported from Libbey Owens in the United States.

