



TO OUR SHAREHOLDERS

NIPPON SHEET GLASS CO., LTD.
154TH FISCAL PERIOD INTERIM REPORT
1 APRIL 2019 - 30 SEPTEMBER 2019

Securities Code: 5202

Cover Photo: Optiwhite™ and Suncool™ Pro T with excellent light transmittance and heat shielding properties are used at the Tepper School of Business, Carnegie Mellon University (Pennsylvania, USA)

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Our Vision



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 2019.

November 2019

Shigeki Mori

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

森 重樹

Summary of the First Half of FY2020 and Outlook for the Second Half

In the first half of FY2020, market conditions grew increasingly challenging with the softened demand in most regions of the world in addition to foreign currency fluctuations. Architectural glass businesses deteriorated substantially in Europe and North America except for the robust solar energy glass business. Meanwhile, Automotive and Technical glass businesses were adversely impacted by the automotive sales decline mainly in Europe and China. Consequently, the Group's sales revenue decreased by 6 percent year-on-year to ¥288.6 billion, operating profit decreased by 17 percent year-on-year to ¥14.9 billion and profit attributable to the owners of the parent fell by 79 percent year-on-year to ¥19 billion.

We anticipate the major markets will continue to lose momentum against the backdrop of economic uncertainties in the second half of the year. The Group will strive to transform its business structure with further sales increase of VA* products, efficiency improvement and cost saving efforts and so forth. With these measures as a springboard, and also capitalizing on the strategic

investment projects for solar glass production and capacity expansion in the emerging market, which are slated to come on stream soon, we are determined to improve our performance in FY2021 and beyond.

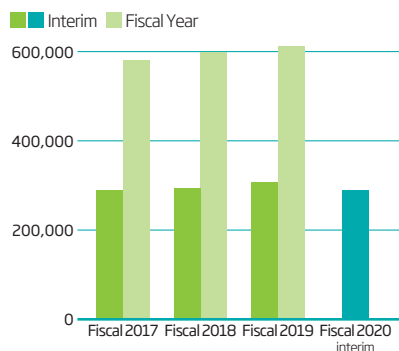
* VA stands for Value added

MTP Phase 2 and the medium - to long-term initiatives

Under the MTP (Medium Term Plan) Phase 2 covering three years up to FY2020 with "Transformation into the VA glass company" and "establishment of financial sustainability" as two major objectives, the Group has made steady progress in raising VA sales ratio and ROS (Return On Sales) improvement. Financially, we boosted the equity while reducing financial expenses and resuming distribution of dividend on ordinary shares. In FY2020, which is the final year of MTP Phase 2, although the business environment worsened drastically and thereby, our financial performance was seriously challenged, we proactively moved ahead with cost reduction measures and saw improvement initiatives yielding results in several focus areas. Also, the strategic investment projects are advancing smoothly for an early

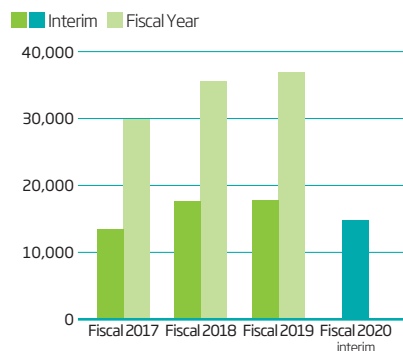
Revenue

Millions of yen



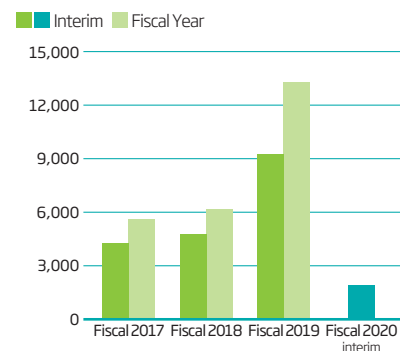
Operating profit

Millions of yen



Profit attributable to the owners of the parent

Millions of yen



FY2020 Actions based on growth phase

Core Business	Profitability enhancement <ul style="list-style-type: none"> ● VA shift acceleration to targeted 50% ● Productivity and cost structure ● Improvement of underperforming businesses
Growth Business	Developing growth opportunity <ul style="list-style-type: none"> ● Strategic investment projects ● Enhancing marketing capability ● Increasing and refocusing R&D ● New product launches
New Business	New Business Development <ul style="list-style-type: none"> ● More resources to Business Innovation Center, moving to execution phase

start of operation. We expect these projects and the growth of orders awarded for our VA products to meet CASE* related needs in the auto industry will drive forward our performance in the next term onwards. We are also laying the groundwork for growth in the longer term perspective. The Business Innovation Center (BIC) established last year was allocated with more resources this year. BIC successfully launched PicoGene™ last April while a number of new products and businesses are in the pipeline.

* CASE stands for Connected, Autonomous, Shared and Electric.

Enhancing Enterprise Value - Untiring efforts for ESG

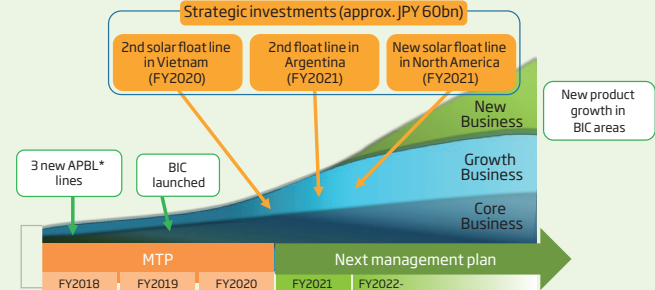
As stated in “Our Vision,” the management principles for the NSG Group, our mission is to “change our surroundings and improve our world.” In accordance with this, we are proactively addressing ESG (Environment, Society and Governance) issues with a view to realizing the society for sustainable growth as well as enhancement of enterprise value in the long term.

We consider corporate governance is the foundation for

Investments for Growth

Selective investments in growing businesses where the Group has its strengths

Ensuring the planned starting up of strategic investment projects and aiming for early return



* APBL : Advanced Press Bending for Laminated glass

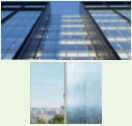

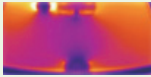


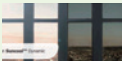


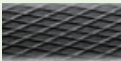
all our business activities. With another Independent External Director joining our Board this year, a majority of the Board now consists of Independent External Directors (5/9). Enhanced disclosure of executive compensation is also the initiatives undertaken this year. In the area of environment, we are pursuing opportunities to make environmental contribution through supplying products aligned with the progress in society leveraging our technological strength, such as smart building, ZEH (Zero Energy House)/ZEB (Zero Energy Building) and EV (Electric Vehicle). At the same time we are also aiming at reducing greenhouse gas emission from our manufacturing processes by 21 percent compared with 2018 by 2030. This target was approved as SBT* initiative in October 2019. Various efforts including process improvement are under way in order to achieve this target.

As an initiative in the social aspect, Inclusion & Diversity is promoted to invigorate the organization with focus on diversity in nationality and gender as well as hiring of persons with disabilities.

* SBT (Science-Based Targets) is greenhouse gas reduction target consistent with scientific data.

Environmental Contribution Opportunities for NSG Products

Wide range of solutions to support the evolution of society, including smart buildings, ZEB & ZEH and electric vehicles

<p>Low-E and vacuum glass for solar control and heat insulation</p> 	<p>Transparent BIPV joint development</p> 	<p>Heated WS to save energy</p> 	
<p>Online-coated glass for dynamic windows</p>  <p>Electrochromic window by View Inc.</p>	<p>Lower environmental impact</p> <p>SMART</p> <p>Comfort</p>	<p>Automotive Low-E glass to reduce air conditioner usage</p> 	
<p>Thermochromic glass to control light</p> 	<p>Glass for solar farms to supply renewable energy to buildings</p> 	<p>Power storage</p> 	<p>Sensors for automation</p> 

Dividend

The Group's dividend policy is to secure dividend payments based on sustainable business results and we will continue to use sincere efforts to declare dividends in coming years. We plan to distribute dividend of 20 yen per ordinary share at the yearend of FY2020 as we predicted at the outset.

We look forward to your continuing understanding and support to the Group.

Consolidated Income statement (summary)

Millions of yen

	Fiscal 2020 interim period	Fiscal 2019 interim period
Revenue	288,625	308,143
Operating profit	14,876	17,856
Profit before taxation	7,196	13,713
Profit for the period	2,404	9,983
Profit attributable to the owners of the parent	1,908	9,261
Basic earnings per share (yen)	3.12	90.16

Consolidated Balance sheets (summary)

Millions of yen

	30 September 2019	31 March 2019
Non-current assets	536,563	516,288
Current assets	240,149	245,581
Total assets	776,712	761,869
Total liabilities	674,620	629,363
Total equity	102,092	132,506
Total liabilities and equity	776,712	761,869

Consolidated Statement of cash flows (summary)

Millions of yen

	Fiscal 2020 interim period	Fiscal 2019 interim period
Net cash inflows from operating activities	1,377	3,092
Net cash outflows from investing activities	(30,179)	(12,259)
Cash flow before financing activities	(28,802)	(9,167)
Net cash inflows/(outflows) from financing activities	23,364	(1,385)
Cash and cash equivalents (net of bank overdrafts) at end of period	42,979	50,786

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

NEWS

World's first high-tech glass selected for passenger windows of Seibu Railway's new limited express train "Laview"

New limited express train "Laview" of Seibu Railway was developed to have a unique look nobody has ever seen before and the world's first Metashine®-printed glass with high thermal insulation was selected for its passenger windows.

The limited express train has an external design that blends into surrounding scenery with the surface of its large window glazing (1,350mm x 1,580mm) finely dot-printed with Metashine® glittering pigments made of glass flake as base material.

Furthermore, NSG's tempered/laminated glass with a sound-proof/infrared-cut interlayer, paired with the multi-glazed tempered glass with proprietary Low-E (low emissivity) coating certainly helps to improve quietness and insulation of the cabin allowing passengers to enjoy a spectacular view in great comfort.



Photo by SEIBU RAILWAY Co.,Ltd.

NSG receives Japan's first Environmental Product Declaration (EPD) for Architectural glass products

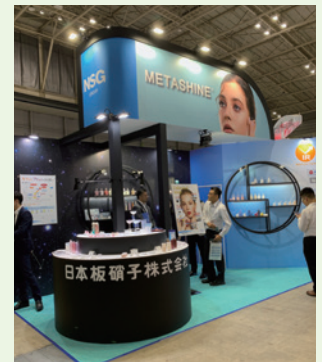
NSG has received Japan's first Environmental Product Declaration (EPD) for architectural glass products, including float glass, insulating glass, laminated glass and tempered glass. EPD is issued by an independent certification organization based on numerical data about the life-cycle environmental impact of products in accordance with ISO14025.

In the US LEED (Leadership in Energy & Environmental Design) certification system to evaluate environmental performance of buildings, the use of products with EPD for the building is one of certification criteria. Thus, it is anticipated that there will be a growing need for such products in Japan, too, as a part of efforts to enhance environmental performance of buildings.



On display at CITE Japan 2019, Cosmetics Ingredients and Technology Exhibition Japan - one of the largest of its kind

NSG exhibited its high-tech glass products at CITE Japan 2019, the 9th Cosmetics Ingredients and Technology Exhibition Japan held from the 15th to the 17th of May 2019 at Pacifico Yokohama, which hosted 41,586 visitors in total. CITE Japan is one of the largest trade fair for cosmetics ingredients and technology in Japan and also drawing much attention globally in recent years. NSG showcased such new products as "Silky Flake®" glittering material featuring gloss and smooth touch and "Metashine®" with near-infrared ray reflection property, both of which earned high reputation.



NSG's advanced glass selected for "ISUZU ERGADUO", Japan's first hybrid joint bus



Photo by Isuzu Motors Limited

NSG's glass products have been selected for ISUZU ERGADUO, the first hybrid joint bus in Japan. A joint bus is expected to help ease traffic congestion, reduce environmental impacts and solve driver shortage and other social issues through mass transport. NSG's advanced laminated glass with 3-D bending is used for its windshield to support safe driving with a clear field of vision while its large-sized flat tempered glass installed in side windows realizes a comfortable and bright interior for passengers.

Pilkington Opti-View™ contributing to protection of Italian masterpiece

The "Preparatory cartoon of the school of Athens of Raphael" is currently on display at the Pinacoteca Ambrosiana in Milan, Italy. At more than 8m long, this Raffaello masterpiece is considered as a work of art in its own right and displayed in the largest showcase in the world protected by Pilkington OptiView™ anti-reflective laminated safety glass.



©Piermario Ruggeri.

NSG Group publishes the Integrated Report 2019

The Integrated Report is a comprehensive report consisting of financial and non-financial information and gives an overview of the Group's initiatives to enhance medium- to long-term corporate value. NSG Group started its publication last year. The Integrated Report 2019 includes "Discussion with External Directors on Corporate Governance" as a part of "Foundations supporting the Corporate Value".



INTEGRATED REPORT 2019



English Link:

<https://www.nsg.com/en/sustainability/reporting/integrated-reports>

Introduction of NSG Group technology and products “NSG TEC™”, glass with Transparent Conductive Oxide Coating, expanding the horizon of glass

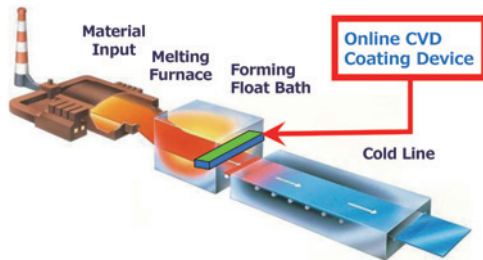
“NSG TEC™” is glass with transparent conductive oxide (TCO) coating, which conducts electricity across transparent metallic coating applied to its surface. NSG TEC™, as “electro-conductive glass” with a high level of durability and resistance to chemicals, is widely in use for PV panels, buildings, cars, medical and electronics devices and many other applications. NSG TEC™ is produced with the “online chemical vapor deposition (CVD)” technology developed by NSG Group to coat glass surface with transparent conductive film by

means of pyrolysis* reaction using a deposition apparatus installed on the float bath. While cut glass must be reheated before coating in the ordinary offline process, NSG’s online CVD process allows coating of hot glass inside the float bath and thus, realizes highly durable metal coating in greater efficiency. Furthermore in March 2018, we announced to have succeeded in producing the world’s thinnest, 0.7mm NSG TEC™ utilizing online CVD technology. The product is attracting keen attention from various sectors as the glass is thinner and lighter while being highly durable and resistant to chemicals.

There is also a growing expectation for diverse new applications for NSG TEC™ including electrode for DSSC (Dye Sensitized Solar Cell), anti-fogging glass freezer doors and heated window and so forth.

*pyrolysis: decomposition brought about by high temperatures

Float sheet glass production and online CVD



Properties of NSG TEC™

- Several types of surface electrical resistivity available for diverse applications
- Durable films formed by thermal reaction at high temperatures, which can be handled in the same way as normal glass.
- Good for processing/post-processing such as toughening, laminating and bending
- A diverse range of glass thickness
- Reflect infrared rays
- Natural tone of a color retaining high transmittance
- Available in a large size, etc

Main applications

- Transparent conductive electrode for solar cells
- Transparent electrode for electrochromic glass
- Touch panel
- Alkaline barrier membrane (TEC SB)
- Heated glass (refrigerated showcase, etc.)
- Front glass for microwave oven, etc.



Terminology

- TEC : TEC: Acronym of Transparent Electrically Conductive
- CVD: Acronym of Chemical Vapor Deposition. CVD is one of coating methods, where highly durable metal oxide is deposited through chemical reactions at high temperatures. Development of online CVD method is explained in detail in “Story 6: Development of CVD technology and the pursuit of thin film solar cells” of People and Technology Section on NSG Group 100th Anniversary Website. <http://100th.nsg.co.jp/story/06/>

Introduction of NSG Foundation for Materials Science and Engineering Marking 40th Annual Grants in Support of Inorganic Materials Research

In March 2019, Nippon Sheet Glass Foundation for Materials Science and Engineering (“NSG Foundation”) marked the 40th anniversary of its establishment. NSG Foundation was established in March 1979, commemorating the 60th anniversary of Nippon Sheet Glass, Co., Ltd. (“NSG”), with an aim to contribute to the progress and development of academic research and technology and the sound development of relevant industries by providing grants to research projects in science and technology related to “inorganic materials”. NSG Foundation started offering grants to domestic research institutes’ research projects on inorganic materials in the first year of its establishment and to overseas research projects, as part of international contribution, in 1992. Further, NSG Foundation also started providing “grants to promote the widespread use of research results” in 2006, supporting researchers to hold meetings for

Overview

Establishment	26 March 1979
Government office responsible	The Cabinet Office
Assets	1.19 billion yen (Basic assets: 920 million yen) (As of 31 March 2019)
Operation	NSG Foundation is operated by the Board of Councilors, which are comprised of experts, the Board of Directors, and Supervisors.

History

March	1979	Nippon Sheet Glass Foundation for Materials Science and Engineering (NSG Foundation) was established.
June	1979	The first grant ceremony was held.
March	1980	NSG Foundation was authorized as an Experiment and Research Corporation
August	1988	NSG Foundation was authorized as a Specific Public-Interest Promotion Corporation
December	2009	NSG Foundation was authorized as a Public Interest Incorporated Foundation
March	2019	NSG Foundation marked its 40th anniversary



the presentation of research projects, which received grants from NSG Foundation, present the research results at academic conferences, and the list goes on. NSG Foundation has been expanding the range of its activities.

It was not only NSG Group but also many companies and individuals that made it possible for NSG Foundation to provide grants of 1,664 million yen for 1,287 research projects in the past 40 years.

In the process of selecting themes of research, a high priority is placed on research in its embryonic stage. The selection process is carried out in a fair and impartial manner by the Evaluation Committee comprising of academic experts representing the fields NSG Foundation covers. NSG Foundation mainly covers glass, ceramic, and other inorganic materials. Having said that, themes of research to discover new functions by nanoscale control have also been on the rise in recent years. Expectations are growing that NSG Foundation will continue to make contributions for new research findings in these fields to come into the world.

NSG Foundation’s website:

http://nsg-zaidan.or.jp/index_en.html





















CORPORATE DATA (as at 30 September 2019)

Company name	Nippon Sheet Glass Co., Ltd.	Established	22 November 1918
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	Number of permanent employees	(consolidated) 26,873
		Paid-in capital	JPY116,591 million
		Stock listing	Tokyo (Code: 5202)
		Contact	https://www.nsg.com/en/contact-us

MANAGEMENT (as at 30 September 2019)

NSG adopts a Company with Three Committees structure.

Board of Directors

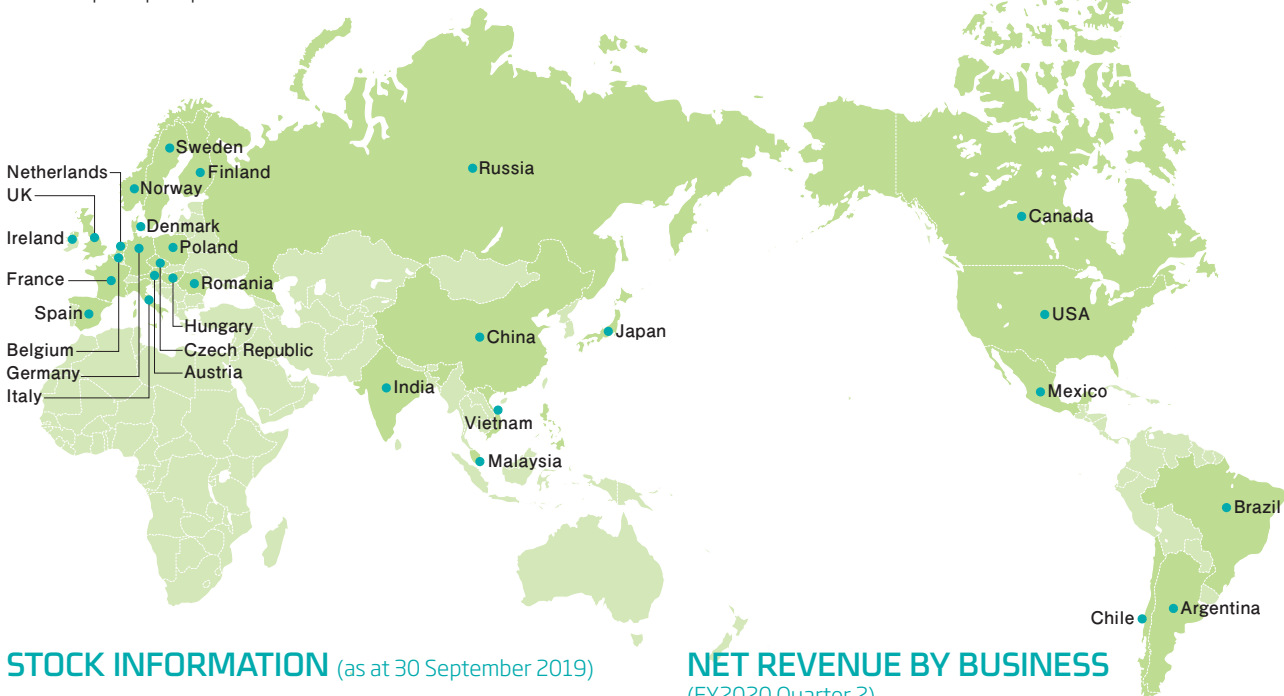
		 Nomination Committee	 Audit Committee	 Compensation Committee
Independent External Director Chairman of the Board	Günter Zorn	 NC Member	 AC Member	 CC Member
Independent External Director	Toshikuni Yamazaki	 NC Member	 AC Chairman	 CC Member
Independent External Director	Yasuyuki Kimoto	 NC Member	 AC Member	 CC Chairman
Independent External Director	Masatoshi Matsuzaki	 NC Chairman	 AC Member	 CC Member
External Director	Yuji Takei			
Independent External Director	Jörg Raupach Sumiya			 CC Member
Director	Shigeki Mori	 NC Member		 CC Member
Director	Clemens Miller			
Director	Kenichi Morooka			

Executive Officers

Representative Executive Officer President and CEO	Shigeki Mori	Executive Officers	Tim Bolas
Representative Executive Officer Executive Vice President and COO	Clemens Miller	Executive Officers	Mike Greenall
Representative Executive Officer Executive Vice President and CFO	Kenichi Morooka	Executive Officers	Hiroshi Kishimoto
Senior Executive Officers	Tony Fradgley	Executive Officers	Shiro Kobayashi
Senior Executive Officers	Koichi Hiyoshi	Executive Officers	John Mercer
Senior Executive Officers	Satoshi Ishino	Executive Officers	Yutaka Nakashima
Senior Executive Officers	Hiroshi Nishikawa	Executive Officers	Iain Smith
Senior Executive Officers	Jochen Settelmayer	Executive Officers	Milena Stanisci
Senior Executive Officers	Phil Wilkinson		

OUR GLOBAL OPERATIONS

We have principal operations around the world and sales in over 100 countries.



STOCK INFORMATION (as at 30 September 2019)

Number of shares/shareholders

Authorized Number of Shares to be Issued	177,500,000 shares
Authorized Number of Shares to be Issued by Class	Common Shares 177,500,000 shares Class A Shares 40,000 shares
Issued Shares	Common Shares 90,603,899 shares Class A Shares 30,000 shares
Number of Shareholders	Common Shares 55,863 Class A Shares 3

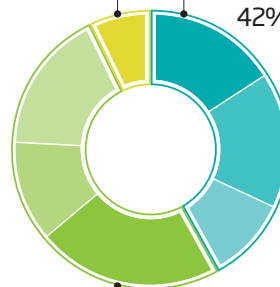
Distribution of NSG Group Shareholders (Common Share)



NET REVENUE BY BUSINESS

(FY2020 Quarter 2)

Technical glass 7% Architectural glass 42%



Automotive glass 51%

Architectural Europe	16%	Automotive Asia	12%
Architectural Asia	16%	Automotive Americas	17%
Architectural Americas	10%	Technical Glass	7%
Automotive Europe	22%		

SHAREHOLDER INFORMATION

Fiscal period	1 April to 31 March of the following year
Ordinary General Meeting of Shareholders	Held annually in June
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	https://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)

Our Website

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

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



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

