

Introduction to NSG

Jan 2021

Nippon Sheet Glass Co Ltd

TSE Code: 5202

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I. NSG Group Today

NSG Group Today



One of the world's largest manufacturers of glass and glazing

- Supplying Architectural and Automotive glass globally and promoting shift to higher added value
- Leading supplier of Technical Glass products including thin glass for display etc., lenses for printers and scanners, specialty glass fiber products^{*1}

Principal operations in approximately 30 countries around the world, with sales in over 100 countries

27 float lines worldwide^{*2 *3}

Approximately 27,000 employees globally (as of March 2020)

Reference: Consolidated Revenue: JPY556.2bn (FY2020)

(*1): Creative Technology was established in October 2020, integrating the former Technical Glass businesses, excluding Fine Glass, and Business Innovation Center (BIC).

(*2): Refer to slide 43 for the float process

(*3): Refer to slide 8 for the location of float lines

History

100-year history. Globalized with the acquisition of Pilkington in 2006

1918 - 1940s Foundation & Expansion	<u>1918: America Japan Sheet Glass Co Ltd established in Osaka</u> 1931: Company name changed to Nippon Sheet Glass Co Ltd 1935: Yokkaichi site opened
1950s - 1960s Capacity Expansion and Start of Automotive Glass	1950: Listing on stock exchanges in Japan 1951/63: Maizuru / Chiba sites opened 1965: First float glass production in Asia at Maizuru site
1970s - 1990s Overseas Expansion & Diversification	1971: First overseas investment made in Malaysia 1978/79: Ultra Fine Float™ / glass fiber business launched 1995: Overseas investment expanded including China and Vietnam
2000s Acquisition of Pilkington & Globalization	2004: Headquarters moved from Osaka to Tokyo <u>2006: Acquisition of Pilkington, becoming global leader in flat glass</u> 2008: “Company with committees” governance adopted
Shift to VA (value-adding)	May 2014: Announcement of Long-term Strategic Vision & Medium-term Plan Apr 2017: Medium-term Plan (MTP) Phase 2 started Nov 2018: Announcement of “Our Vision”

Management Principles — “Our Vision”

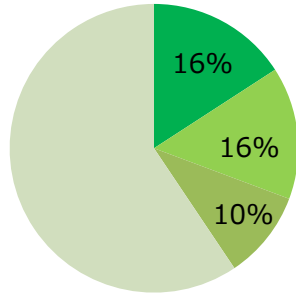
Announced in November 2018, at the Company’s 100th Anniversary



Businesses

Global Three Businesses: Architectural, Automotive, and Technical Glass

Architectural: 42%



■ Europe ■ Asia ■ Americas

Products:

- Building glass & glazing
- Glass for solar panels

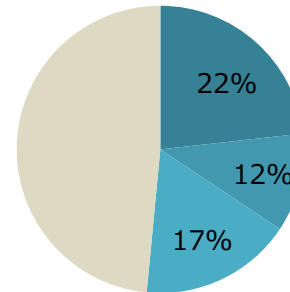
Business:

- 27 float lines operated globally
- Leading supplier for thin film solar panels



Granroof at Tokyo Station

Automotive: 51%



■ Europe ■ Asia ■ Americas

Products:

- Glazing for new vehicles
- Glazing for replacement markets

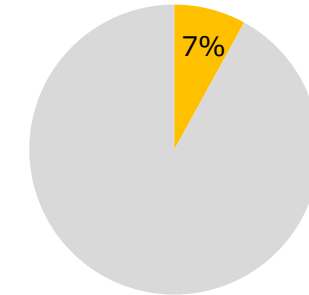
Business:

- Key operations in 14 countries
- Supplying world's leading vehicle manufacturers
- Key player globally in automotive aftermarket (AGR) glazing distribution and wholesale



Complex-shaped back light
Courtesy of TOYOTA Global Newsroom

Technical Glass: 7%



Products:

- 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.

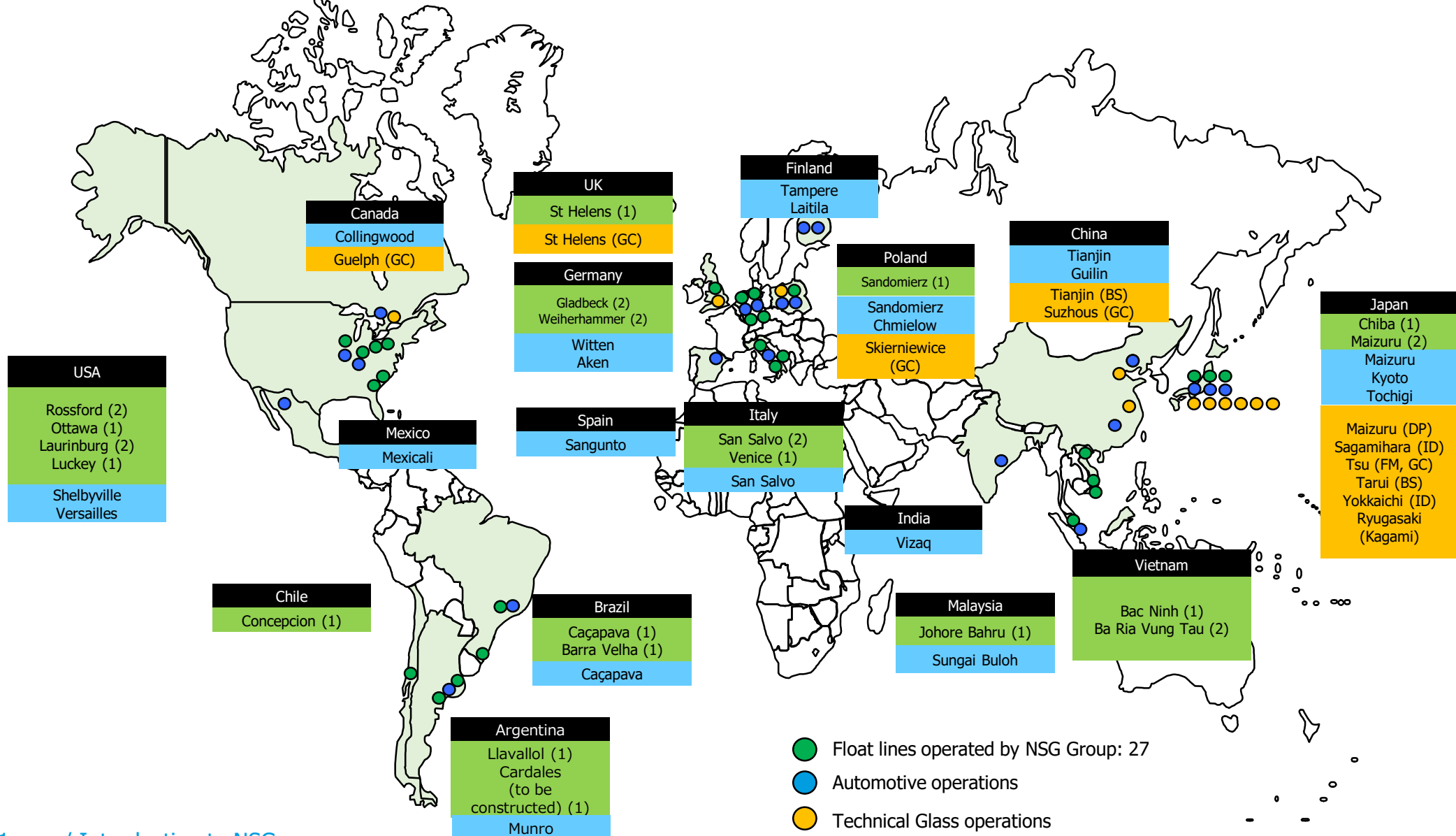
Business:

- Key operations in Asia and Europe
- Unique 'Number One' and 'Only One' niche products



Super Glass Paper™

Global Footprint



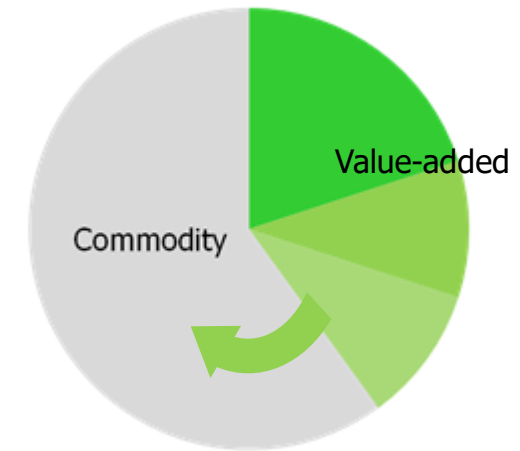
II. Long-term Strategic Vision & Management Policy

Long-term Strategic Vision

Announced in May 2014

Long-term Strategic Vision:

Transform into 'VA Glass Company'



Strategic Intent

- Transform the whole Group structure into "VA-ready" while increasing the VA ratio in the Group's sales

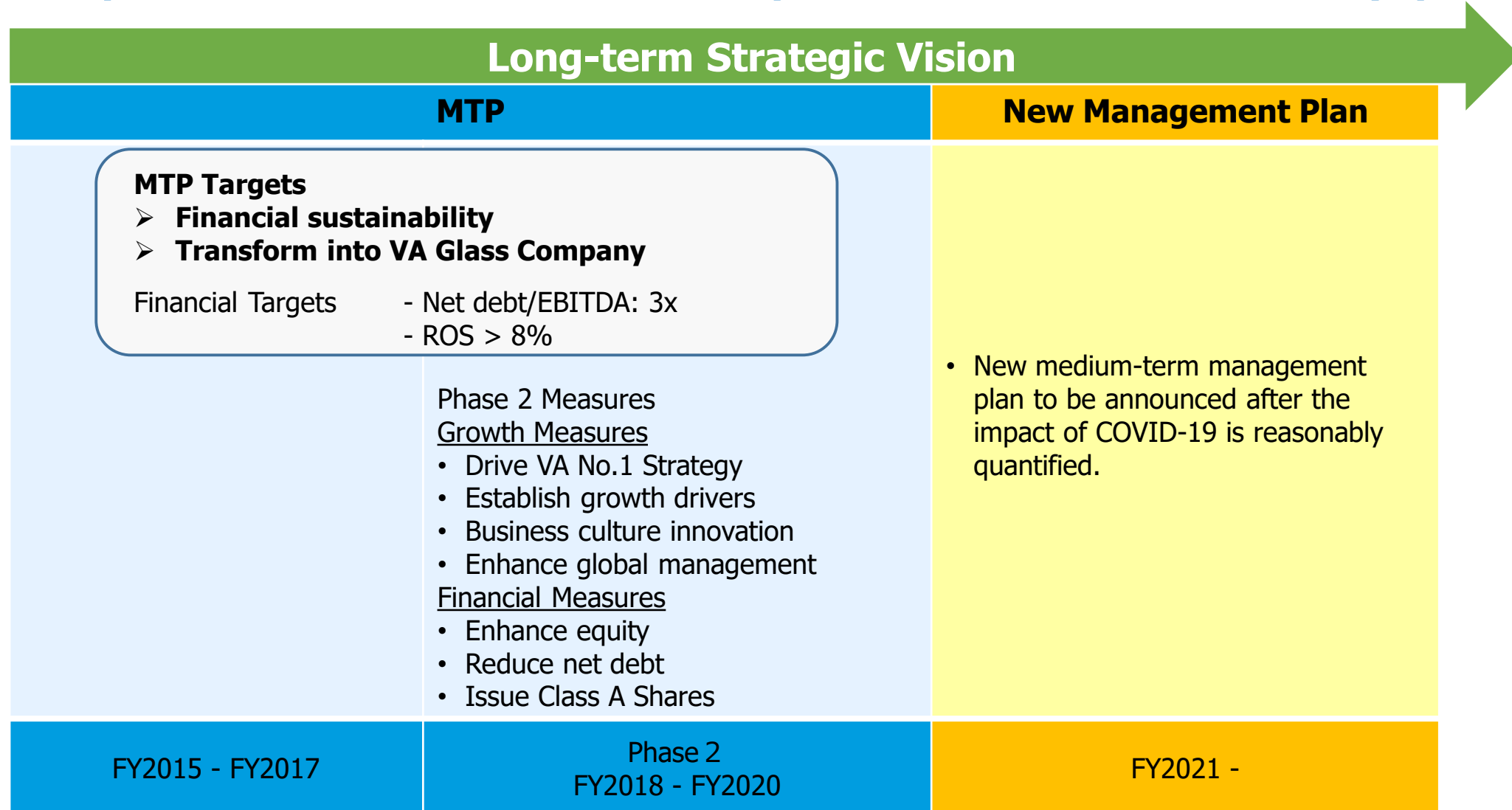
Objectives

- Consolidate our trusted reputation as a glass specialist
- Work closely with customers worldwide to offer unique value through our products and services
- Transform business structure from a traditional model to a value-added model

* VA: Value-added

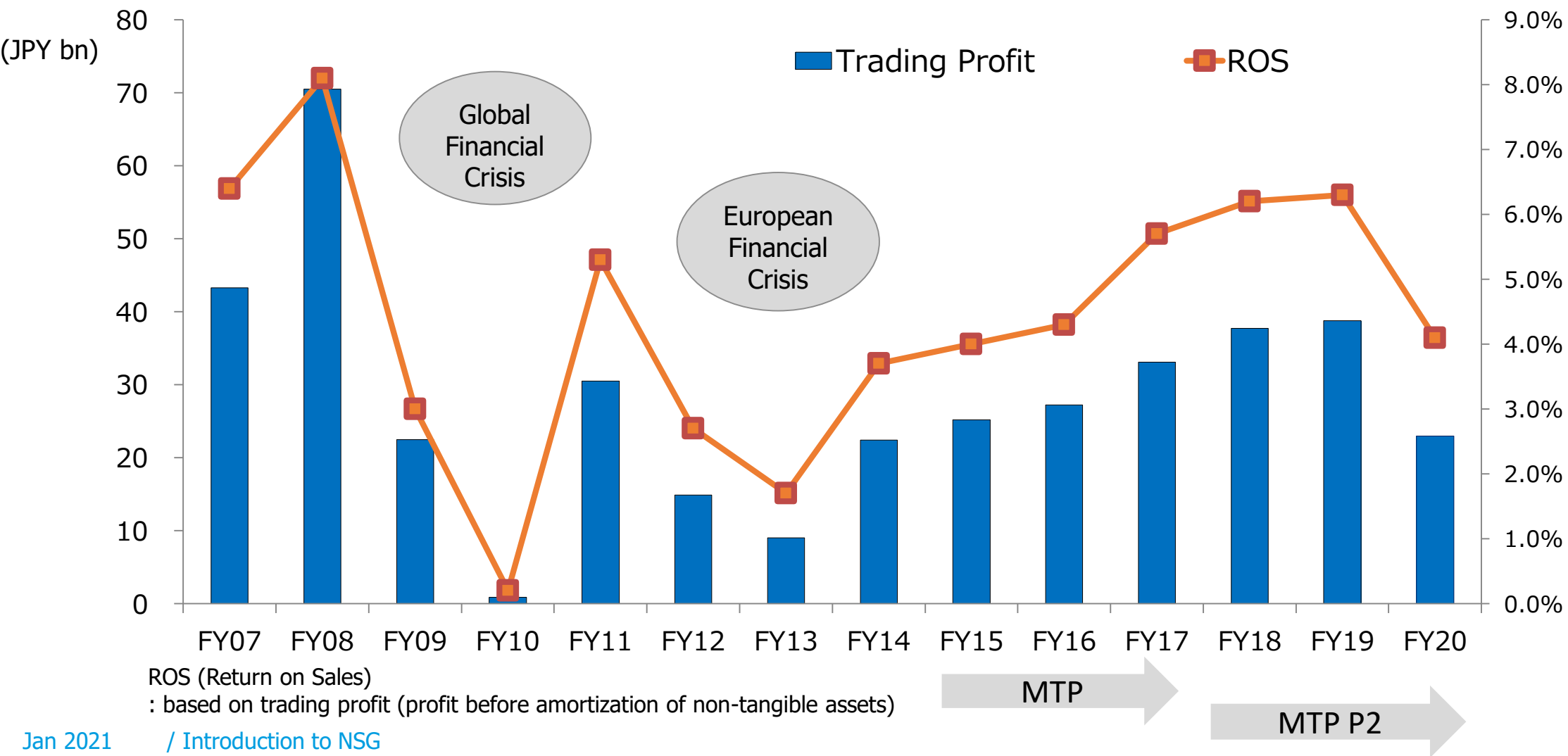
Long-term Strategic Vision & New MTP

New plan to be announced after the impact of COVID-19 is reasonably quantified



Trading Profit & ROS

Improvement during MTP Phase 2 decelerates in FY2020 against headwinds of challenging trading conditions and significant impact of COVID-19



KPI Update

Set back in FY2020, followed by a significant impact of COVID-19 in FY2021 H1

<u>MTP Phase 2</u>					
Financial KPI	FY17	FY18	FY19	FY20	FY21 H1
ROS	5.7%	6.2%	6.3%	4.1%	1.4%
Net Debt/ EBITDA	5.0X	4.8X	4.9X	7.1X	10.2X
[Reference]					
Equity Ratio	15.7%	17.1%	16.2%	9.6%	6.4%
ROE	4.9%	4.7%	10.3%	(19.2)%	(28.3)%
VA Sales Ratio	41%	44%	46%	46%	46%

ROS: based on trading profit **before** amortization of non-tangible assets up to FY2020 and **after** amortization of non-tangible assets from FY2021

Business Environment Outlook and Direction

Recognizing challenging situation, launching a business transformation initiative with a sense of urgency

Future outlook

- Car demand anticipated not to return to the pre-pandemic levels until around FY2025, and the growing environmental awareness accelerating electrification
- No significant demand fall anticipated for architectural glass, but commoditization will accelerate
- Digital transformation (DX) will reshape every industry

Execution of Business Transformation

- Aiming to weather the current situation, return to meaningful net profit in FY2022, and build a sustainable business structure, a drastic business transformation has been launched in October 2020 to be executed over coming years
- CTrO reporting directly to CEO, has been appointed to drive the initiative across the Group
- The key actions are: cost transformation; acceleration of growth; and organizational / business reform

Execution of Business Transformation

Reform across the Group to ensure meaningful net profit in FY2022

Cost Transformation

Cost improvement of over JPY10bn in FY2022

- Transform cost structure to generate stable profits and cash at soonest timing
- Significant fixed cost improvement with about 2000 headcount reduction
- Big improvement in production and procurement costs

Acceleration of Growth

Business portfolio change in light of future demand trend changes

- Early contribution of growth businesses including solar glass as well as VA shift.
- Acceleration of new business development with new Creative Technology Business

Organizational / Business Reform

Management structure for speedy decision-making with sense of urgency

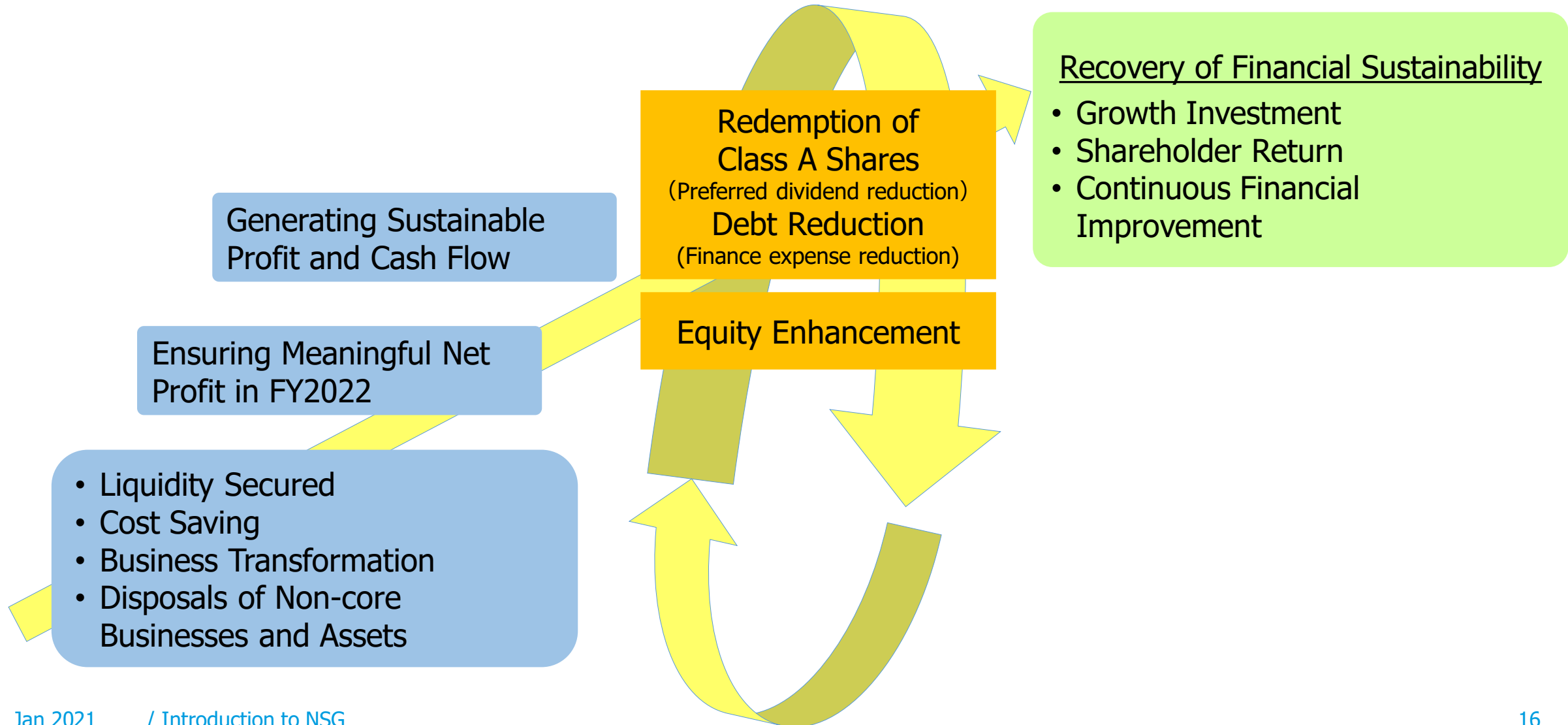
- Acceleration of decision-making and execution by management structure changes, reducing hierarchy and more delegation of authority
- Commitment to results and accountability

- Options to secure fund and profit including disposals to be reviewed continuously
- New medium-term management plan incorporating the fundamental improvement plan will be published going forward

* Financial impact of individual project will be assessed and announced as appropriate, when clarified

Steps to Financial Sustainability

Priority on returning to net profit and recovering equity. Then, a balanced approach for growth investment, shareholder return and financial strength



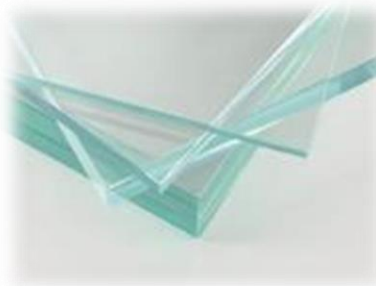
III. Our Business

Architectural Glass

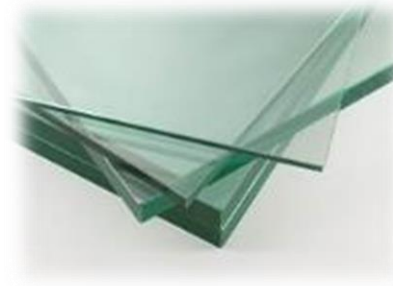
Value creation based on energy saving & generation, health & safety, design & visibility



↑ Glass for thin film Solar panels
Courtesy of First Solar Inc.



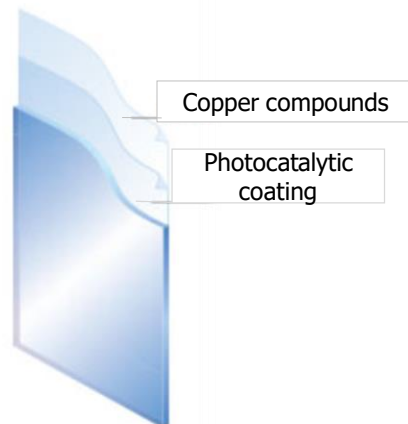
↑ Optiwhite™
(High transmission glass)



↑ Conventional glass



↑ Glass for electrochromic applications
Courtesy of View Inc.



↑ Anti-virus glass



↑ Low-e coated glass



↑ MirroView™
(High reflection glass)



↑ Optiwhite™ used for
Midtown Hibiya in Tokyo



↑ Spacia™
(Vacuum glazing)

Solar demand remains robust with increasing shift to renewable energy

- Supplying value-added glass for thin-film solar panels

2nd float line in Vietnam

- Start up: February 2020
- Site: Ba Ria Vung Tau (near Ho Chi Minh)
- Conversion of suspended float line



New float line in the US

- Start up: FY2021 H2
- Site: Luckey, Ohio
- Greenfield

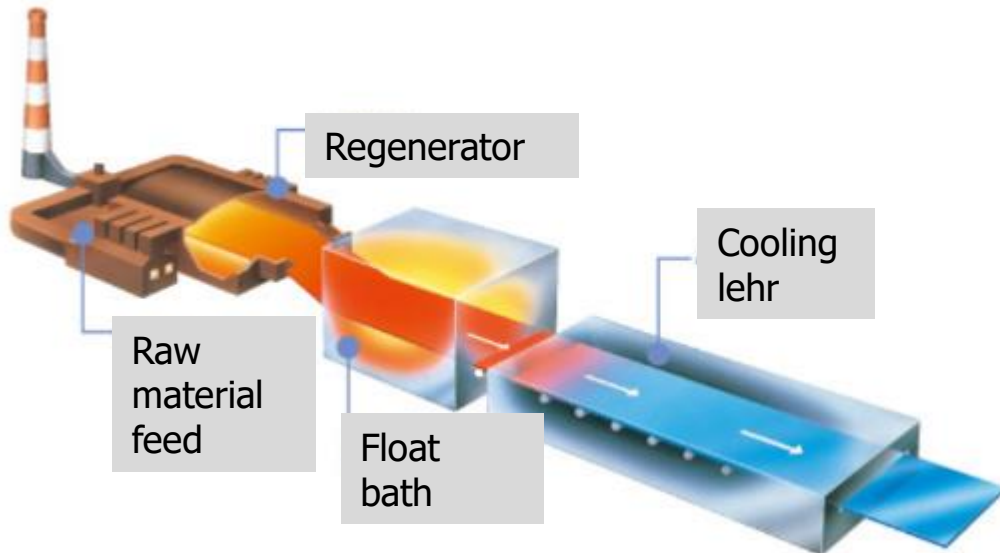


Growth of Online-coated Products

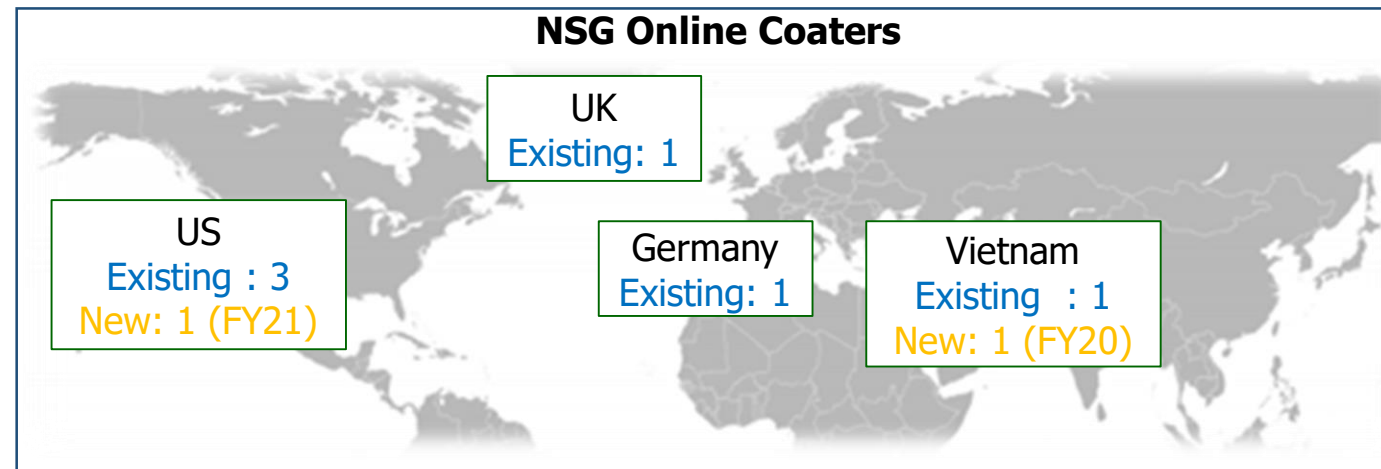
Proprietary online coating technology to support VA

- NSG's proprietary technology
- Thin, uniform metallic oxide film deposited over glass while being formed inside the float bath
 - Cost competitive, available in large size
 - Durable and versatile, suitable for further processing and various applications

Function	Use
Conductivity	Heating glass
	Transparent conductive film for touch panels
	Transparent conductive film for thin film solar panels
Infrared reflection	Heat insulation glass
	Heat blocking glass
	Low e glass



NSG Online Coaters



Strategic Investment – South America

**Investing in new float line in Argentina, leveraging 80 years of business experience and solid market position in South America
(Currently suspended)**

- VASA is the only flat glass manufacturer with 8 decades of experience in Argentina
- Solid market position and customer base. Stable business management, adept at managing country-specific risks
- Suspend capital investment due to COVID-19

Summary

- Facility: 2nd float line for Vidrieria Argentina SA (VASA*) (capacity: 900 ton/day)
 - * A subsidiary in Argentina, jointly held with Saint-Gobain (NSG: 51%; Saint-Gobain: 49%)
- Site: Cardales (near Buenos Aires)
- Start-up: not yet confirmed
- Market: Argentina and neighboring countries



Automotive Glass

Value creation along with
advanced automotive technologies

- Lightweight
- Fuel efficiency
- Heat insulation & blocking
- Electric vehicle



Environment



Safety & Security

- Autonomous driving
- Visibility
- High rigidity



Connectivity

- Augmented reality head up display (AR HUD)
- Internet of Things (IoT)



Comfort & Convenience

- Heat insulation & blocking
- Ambient lighting
- Acoustic
- UV/IR cut

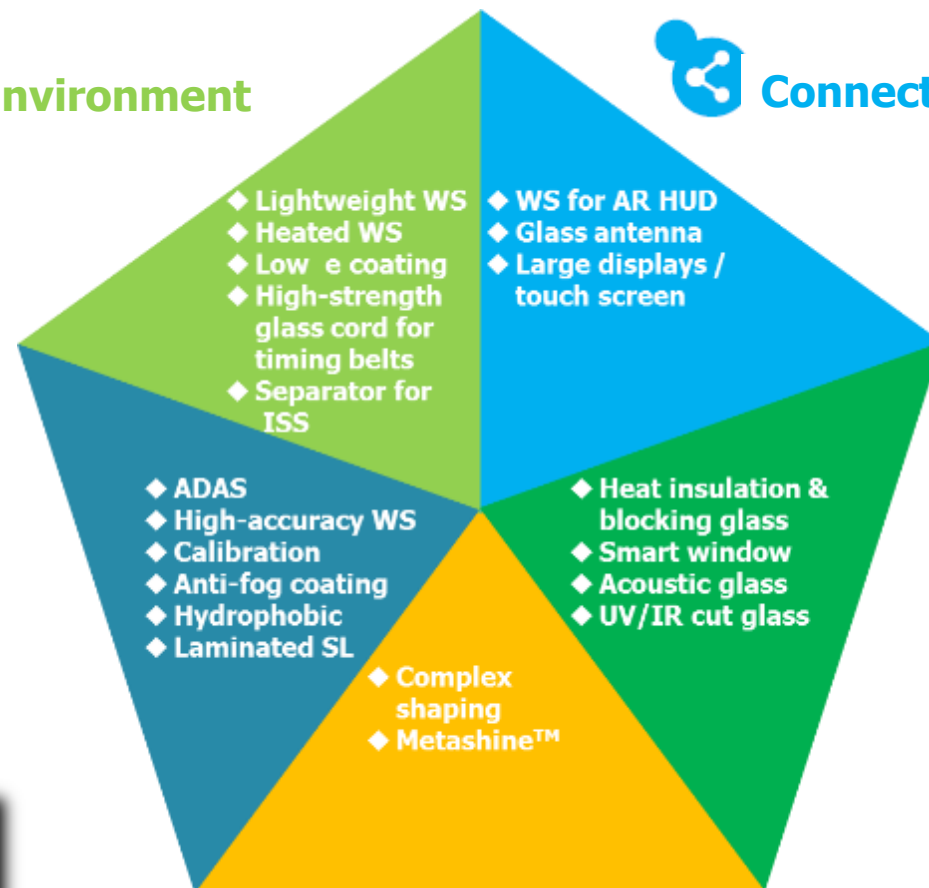


Courtesy of Mazda Motor Corporation CO. Ltd.



Style

- Streamline design
- Exterior



WS: Windshield; ISS: Idling stop & start; SL: Side light
ADAS: Advanced driving assistance system

CASE-Aligned VA Products for Growth

More VA awards in pipeline to improve business performance,
leveraging the Group's technical strengths

- Environment
- Connectivity
- Safety & Security

- Comfort & Convenience
- style

**Low-E
Rooflights**
Europe EV
growth

**Heated
WS**
coating, no
wire

**Premium
HUD**
large HUD
AR/VR

**Light
weight
WS**
premium
sports
vehicles

**Thin glass
for interior**
thin glass for
car-mounted
display with
FG technology

**Next-gen
antennas**
anticipating
shift to 5G

High-precision Glass for ADAS & HUD

Increased demand for precision-shaped windshield

- Many of ADAS features rely on cameras mounted to windshields
- High precision windshields required for proper sensing (OE and AGR)



- Adopted for LEXUS LS windshield with a largest HUD and all-new 2021 Chevrolet, GMC, and Cadillac SUV Models



Courtesy of TOYOTA Global Newsroom



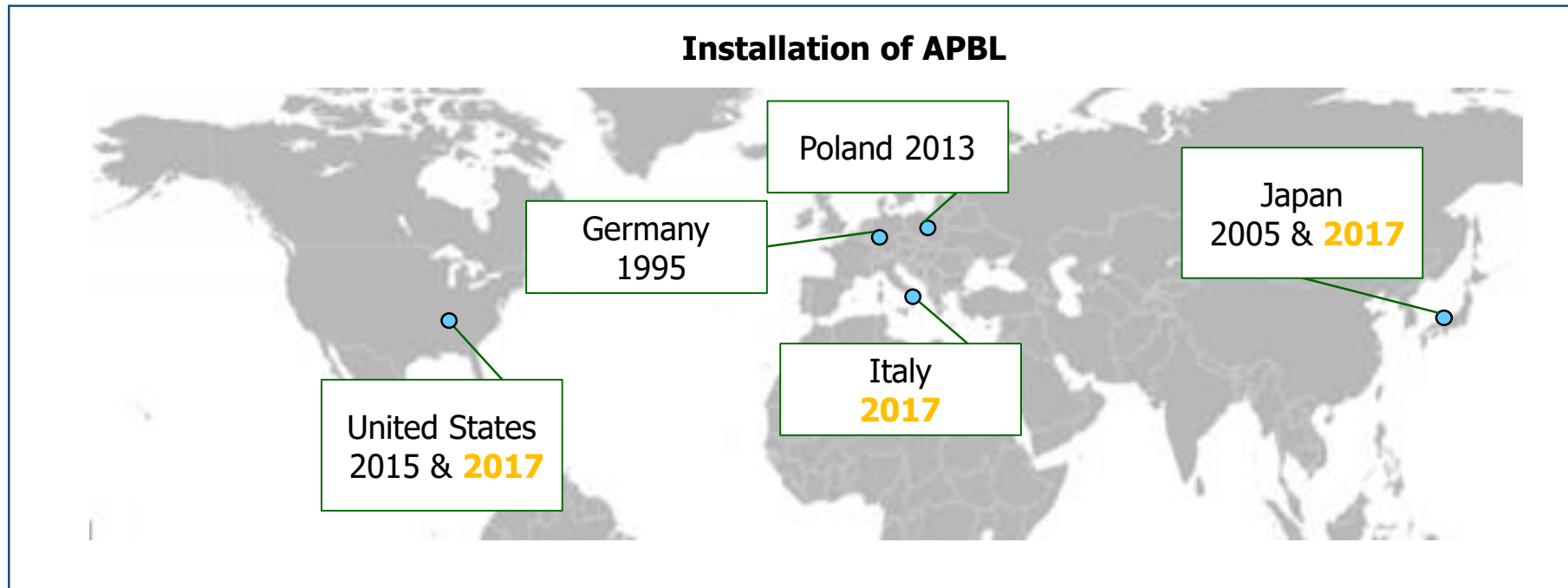
2021 GMC Yukon & Yukon XL

Courtesy of General Motors



Global footprint of press bending equipment for high-precision windshields

- With the advancement of automotive technology such as ADAS and HUD, highly accurate front glass molding that needs increase
- New lines of APBL* started in Japan, Europe and the US in 2017.
- Developed inhouse, and started production in Germany in 1995, ahead of competitors



* APBL: Advanced press bending for laminated glass

Value Provided for AGR

Working from wholesale to retail business, providing value to our customers



- Availability & product range
- Well-established wholesale network
- Customer focused services



ADAS calibration

- Impact of ADAS enabled us to offer new services

- Opportunity
 - ✓ ADAS systems often require calibration of the cameras after windshield replacement
- Our Business
 - ✓ Opti-Aim™ developed to support our customers in the US
 - ✓ Training services for ADAS calibration are offered in South America

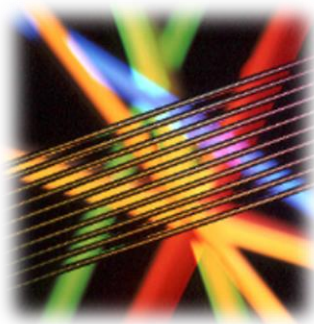


Technical Glass

Unique products and
new business opportunities



↑ Thin glass; glanova™



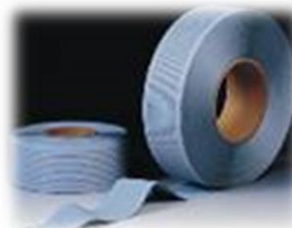
↑ SELFOC™ Lens Array



↑ Super Glass Paper



↑ Glass cord



↑ PE separators



↑ AGM separator



↑ Metashine™

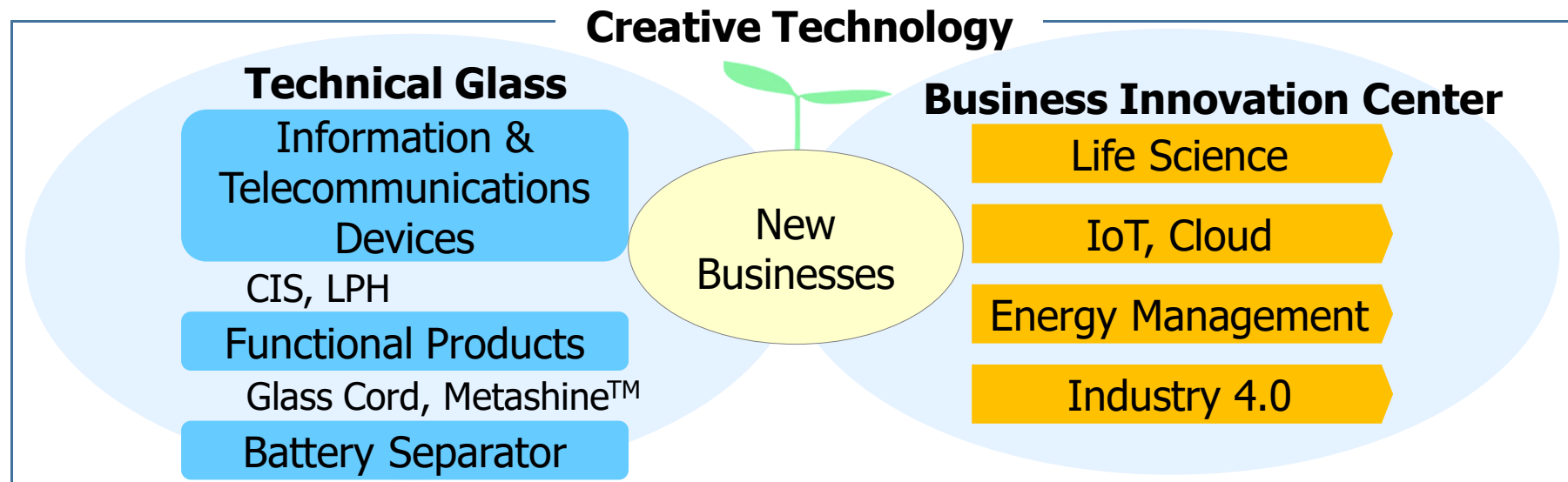


↑ Glassflake

New Business Development and Creation of Customer Value

Acceleration of growth with new Creative Technology Business

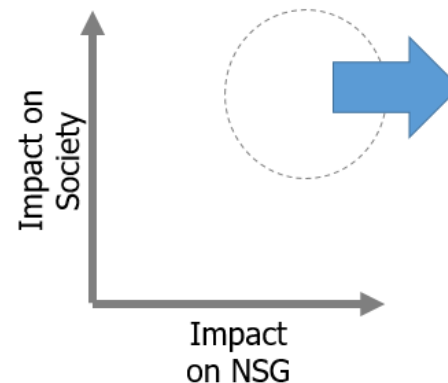
- Established to lead the Group's growth strategy
- Consisting of former Technical Glass, excluding Fine Glass, and Business Innovation Centre (BIC).
- Aiming to accelerate new business development in the non flat glass business area, swiftly responding to diversified requirements of markets in different regions and industrial sectors



*The segment information for financial disclosure remains unchanged in FY2021

IV. ESG* for Creating Value

New Materiality



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

* ESG: Environment, Social, Governance

Sustainability Progress

Quantitative targets and KPIs set based on identified materiality

	FY2018/19 Results	FY2020 Results
Safety	<ul style="list-style-type: none"> 3% yoy worsening in FY2019 with no fatalities 	<ul style="list-style-type: none"> Significant Injury Rate result was at the same level as FY2019
Waste	<ul style="list-style-type: none"> Waste reduction versus FY2014 was 23% reduction 	<ul style="list-style-type: none"> Waste reduction versus FY2014 was 28% reduction
Energy & CO2 reduction	<ul style="list-style-type: none"> Achieved 1% CO2 reduction 	<ul style="list-style-type: none"> Worse than the prior year due to a reduction in product output associated with deteriorating market conditions
Sustainable VA products	<ul style="list-style-type: none"> 46% in FY2019 	<ul style="list-style-type: none"> 46% in FY2020
Responsible sourcing & transportation	<ul style="list-style-type: none"> 75% of key suppliers have agreed to SCoC 	<ul style="list-style-type: none"> 85% of key suppliers have agreed to SCoC
Employees	<ul style="list-style-type: none"> Overall engagement score declined yoy I&D manager training progressing 	<ul style="list-style-type: none"> Improve NSG engagement score Increase inclusion & diversity awareness by training managers etc.
Ethics & compliance	<ul style="list-style-type: none"> Regional structure adopted for E&C organization 	<ul style="list-style-type: none"> Launched the training package covering Code of Ethics, conflict of interest, fraud, social media and Ethics and Compliance reporting etc.

NSG Group Integrated Report: <http://www.nsg.com/en/investors/ir-library/annual-reports>

G: Corporate Governance

Framework to bolster sustainable growth

Diversity & independence of Board of Directors – material decision making and supervision of executives, representing shareholders

- Clear separation of roles between Board chairman and CEO; robust succession plan
- Adequate pay incentives aligned with interests of shareholders

Key developments

- 2008: “Company with Committees”; 4 Independent External Directors
- 2012: All 3 Committees chaired by Independent External Director
- 2013: The Board chaired by Independent External Director
- 2014: Share purchase element in LTIP; shareholding targets for EOs
- 2015: Publication of NSG Group Corporate Governance Guidelines
- 2016: 1st Effectiveness Evaluation; compliance with all the principles of CGC
- 2019: Independent External Directors constituting the majority of the Board.

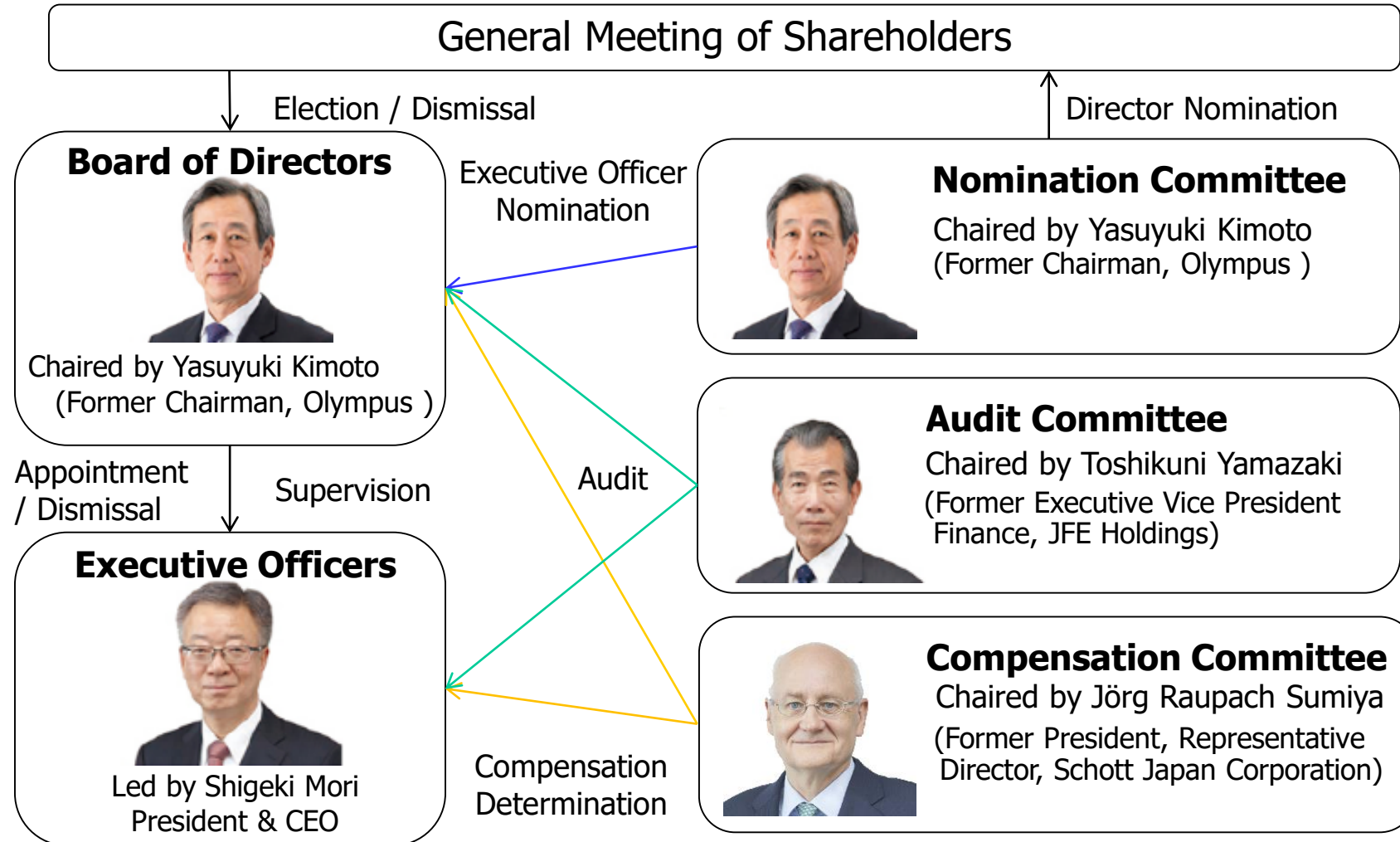
Board Effectiveness Evaluation

Led by Independent External Directors; the following action plans have been set and followed up

- Deeper discussion on key agenda items such as growth, finance, HR and ESG strategies
- More understanding of executive resources and stronger monitoring to improve performance
- Thorough following-up of the executives' execution and delivery of key decisions and tasks
- Promotion of diversity including appointment of non-Japanese and/or female director(s)

G: Corporate Governance

The Board & Committees all chaired by Independent External Director



G: Board of Directors

Robust governance with a majority of the Board of Directors being independent



Yasuyuki Kimoto
Independent External
Director
Chairman of the Board



Toshikuni Yamazaki
Independent External
Director



Jörg Raupach Sumiya
Independent External
Director



Hiroshi Ishino
Independent External
Director



Kunihiro Minakawa
Independent External
Director



Yoshihiro Kuroi
External Director



Shigeki Mori
Director
President
Chief Executive Officer



Kenichi Morooka
Director
Executive Vice President
Chief Administration Officer
Chief Risk Officer

Nomination Committee	Audit Committee	Compensation Committee
Yasuyuki Kimoto (Chairperson) Toshikuni Yamazaki; Jörg Raupach Sumiya; Hiroshi Ishino; Kunihiro Minakawa; and Shigeki Mori	Toshikuni Yamazaki (Chairperson) Yasuyuki Kimoto; Jörg Raupach Sumiya; Hiroshi Ishino and Kunihiro Minakawa	Jörg Raupach Sumiya (Chairperson) Yasuyuki Kimoto; Toshikuni Yamazaki; Hiroshi Ishino; Kunihiro Minakawa and Shigeki Mori

G: Executive Officers

International executive team

Representative Executive Officers



Shigeki Mori

Director
President
Chief Executive Officer



Kenichi Morooka

Director
Executive Vice President
Chief Administration Officer
Chief Risk Officer

Senior Executive Officers



Tony Fradgley

Chief Transformation Officer



Koichi Hiyoshi

Chief Legal Officer
Company Secretary



Munehiro Hosonuma

Head of Architectural Glass



Satoshi Ishino

Chief Development Officer
Head of Creative Technology
Head of Business Innovation Center



Reiko Kusunose

Chief Financial Officer



Hiroshi Nishikawa

Transformation Director Asia
Head of Fine Glass



Rob Purcell

Head of Automotive OE



Phil Wilkinson

Global Head of Automotive AGR

Executive Officers

- **Tim Bolas** (Finance Director – Operations)
- **Mike Greenall** (Chief Technology Officer)
- **Shiro Kobayashi** (Global Sustainability Director)
- **John Mercer** (Chief Procurement Officer)
- **Yutaka Nakashima** (Chief Human Resources Officer)
- **Iain Smith** (Finance Director – Global Finance)
- **Milena Stanisci** (Head of Manufacturing Excellence and Head of Manufacturing, Automotive OE)

G: Long-Term Incentive Plan (LTIP)

Senior management incentive plan designed to enhance shareholders' value

Plan: Long-term incentive scheme over a three business-year period

- Aiming for alignment with interest of shareholders by factoring up or down according to the share price movement during the three-year period and by requiring to invest 50% of proceeds to purchase shares

Subject: Senior management including Executive Officers

Performance measures: Key long-term financial targets for the Group are chosen

- Plan stated in FY2016: aggregate earnings per share
 - 51% paid against the maximum LTIP payment (Target: JPY364.6; Actual: JPY339.7)
- Plans started in FY2017 and FY2018: aggregate earnings per share
- Plans started in FY2019 and FY2020: aggregate earnings per share and return on sales (ROS)
- **Shareholding:** 50% proceeds required to purchase ordinary shares (from the plan started in FY2015^{*1})
 - Incentivize to increase shareholder value as shareholder and alignment with shareholders' interest
 - Shareholding targets over a period of time; annual assessment of progress
- **Malus and Clawback clauses are incorporated in all LTPs**
 - Exercisable by NSG if one of listed triggering events occurs
 - Triggering events include: a misstatement of financial results which are the basis of incentive payments; serious illegal act; and material breach of the Group Code of Ethics.

^{*1:} The first payment was made based on the plan started in FY2016, as no payment was made for one started in FY2015.

E: Reducing CO2 Emission

Manufacturing process improvement aiming for mitigating business risk

In addition to environmental contributions from NSG products, work is underway to reduce GHG emission from manufacturing processes

SBT Initiative targets approved in October 2019

- 21% reduction by 2030 vs 2018
- Fuel energy conversion, manufacturing process, increased usage of renewable energy (e.g. solar installation at a UK site)

Green Energy

In Europe, contract in place to switch 50 percent of electricity to green energy



Solar Energy

PV panels installed or planned at Lathom (UK), Northwood (US) and other Group sites

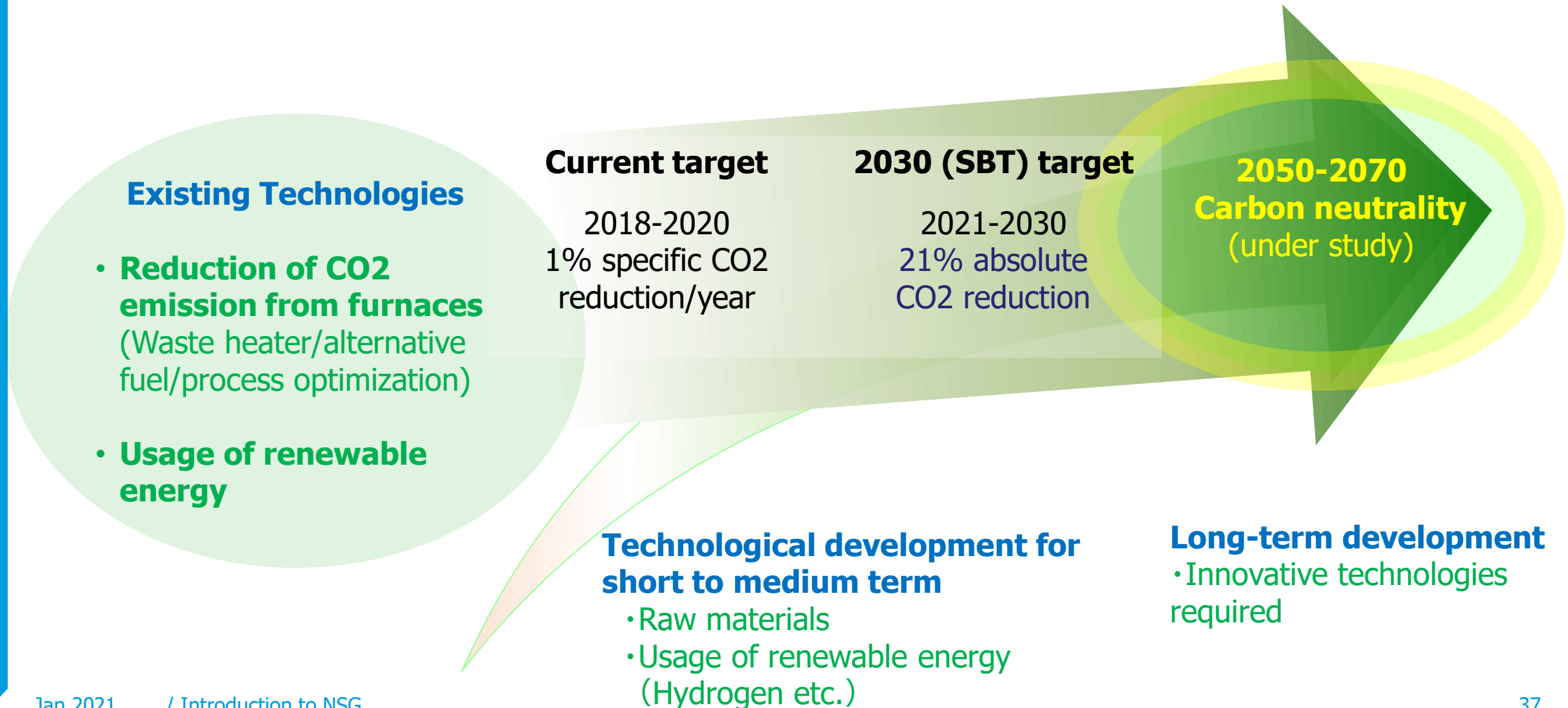


*ESG: Environment, Social and Governance

Lathom (UK)

E: CO2 reduction road map

Aiming for 2030 reduction target, as first step to carbon neutrality



E: Contribution Opportunities for NSG Products

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

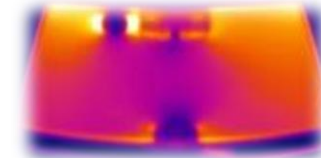
Low e and vacuum glass for solar control and heat insulation



Transparent BIPV joint development



Heated WS to save energy



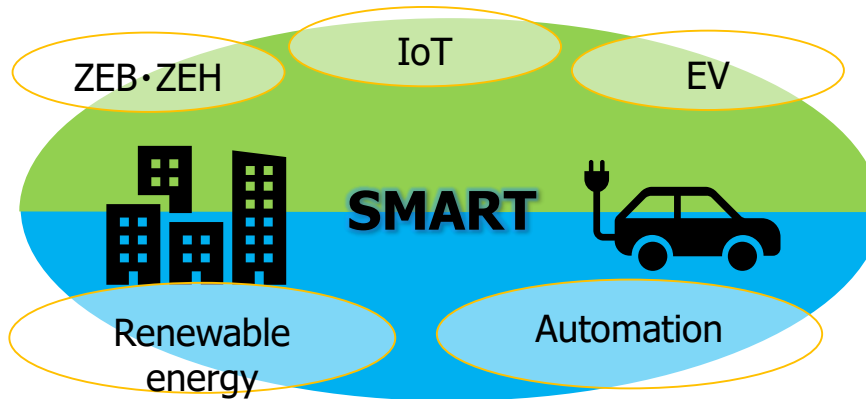
Online-coated glass for dynamic windows



Electrochromic window by View Inc.



Thermochromic glass to control light



Automotive low e glass to reduce air conditioner usage



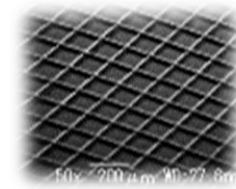
Glass for solar farms to supply renewable energy to buildings



Power storage



Sensors for automation



S: Contribution to Society

Mission and responsibility as good corporate citizen

Employees

- New appraisal and talent development program introduced and trained
- Promotion of inclusion & diversity

Supply Chain

- 75 percent of key suppliers agreed to “Supplier Code of Conduct” or adopted their own equivalent code

Ethics and Compliance

- Adoption of regional structure for ethics & compliance organization
- Due diligence conducted on business partners

NSG Foundation

- NSG Foundation was established to commemorate the 60th anniversary of NSG with the aim to contributing to the promotion of R&D activities on inorganic materials through research grants, which amounts to JPY1,664 million for 1,287 projects cumulatively.

Notice

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

Nippon Sheet Glass Company, Limited

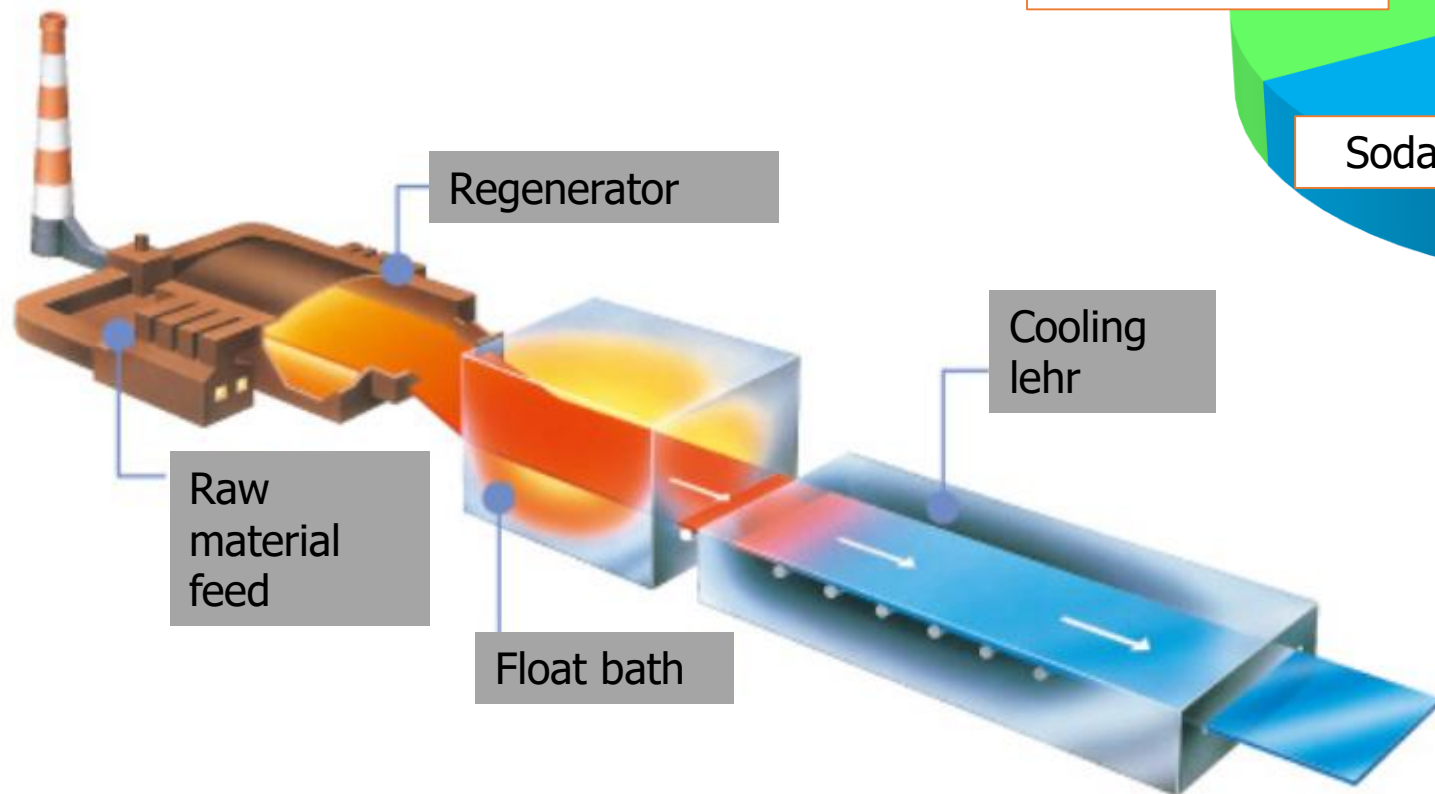
V. Appendices

1. Manufacturing Process

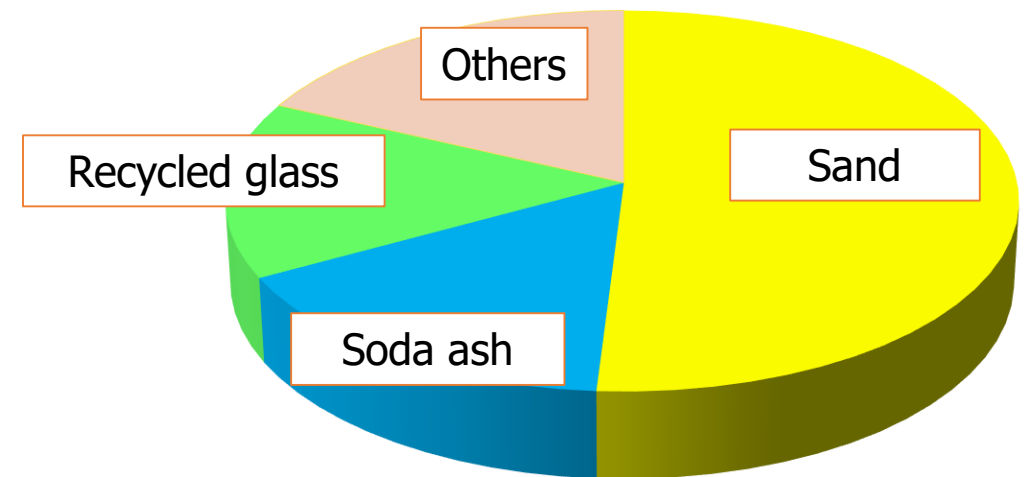
Float Process

Float glass:

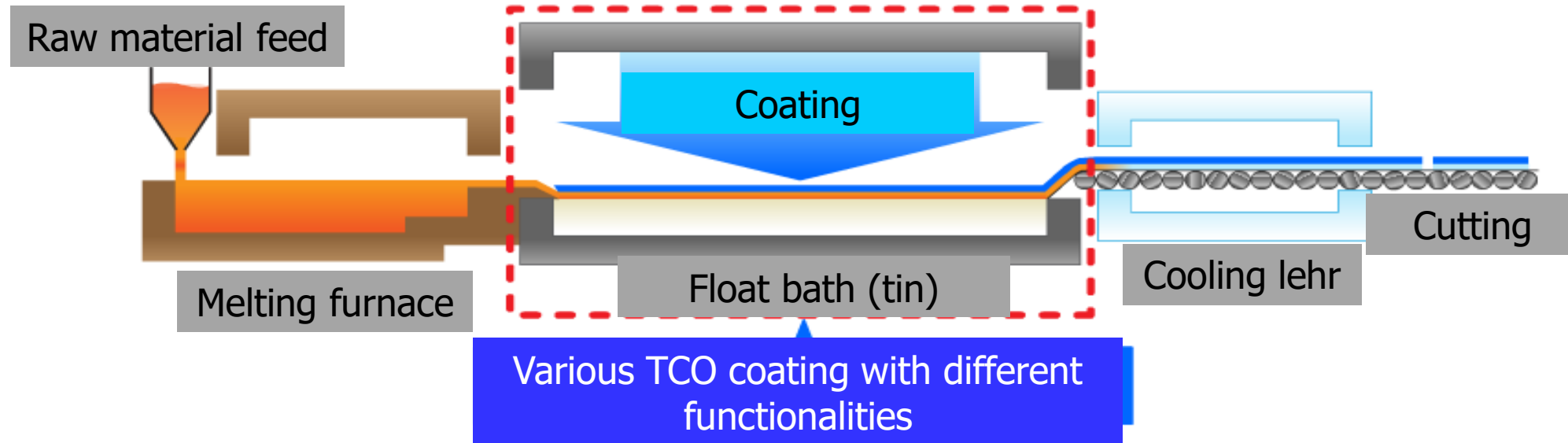
Molten glass is poured continuously from a furnace onto a shallow bath of molten tin. It floats on the tin, spreads out and forms a level surface. This method was introduced to the world as the float process in 1959.



Raw material



Online Coating



- Thin, uniform metallic oxide film deposited over glass while being formed inside the float bath
- Cost competitive, available in large size
- Durable: suitable for further processing & for use as an external glass pane
- Versatile: architectural, solar & automotive applications
 - Technical applications include thin or curved displays, OLED lighting and thin-film sensors

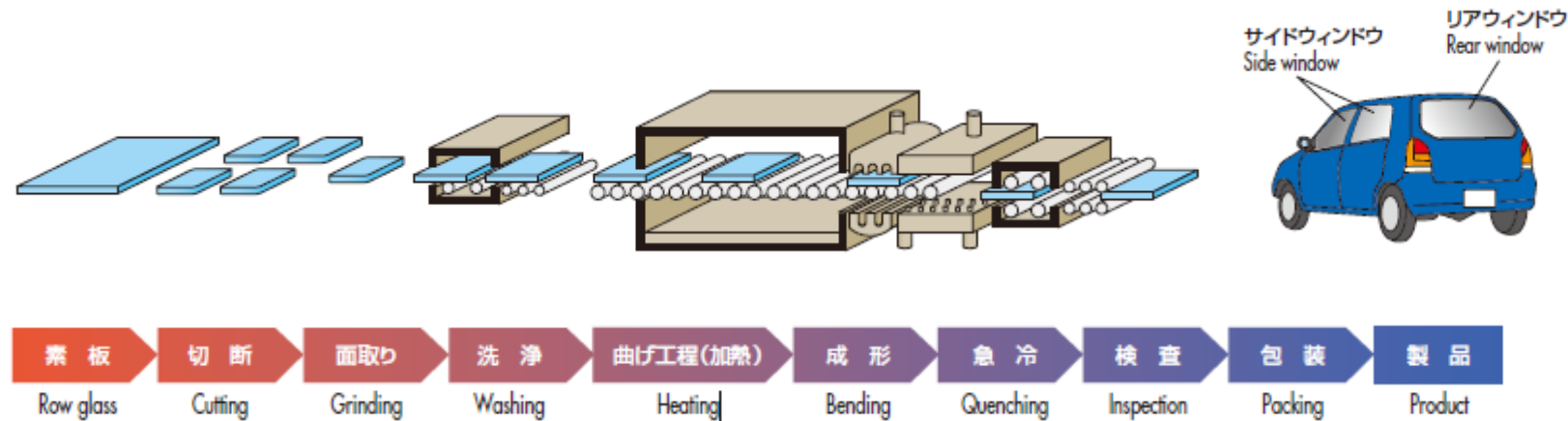
Automotive Glazing – Toughening

Toughened Glass:

Flat glass is placed in a tempering oven, and heated to between 650 and 700°C, which is near the glass softening temperature.

Then the glass is quenched by blowing air evenly on both sides, causing the surface to harden first, with the inside cooling and shrinking later. The result is the formation of a stable compressive stress layer at the surface, and the glass is 3 to 5 times more resistant to impact than ordinary glass.

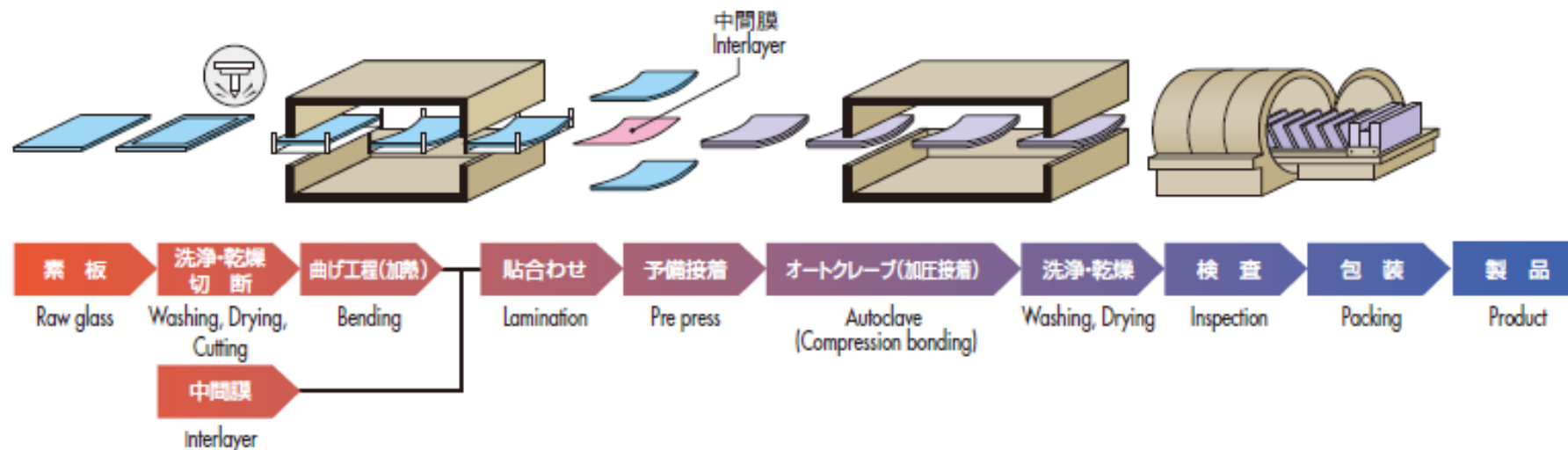
This glass is mainly used for the side and rear windows of automobiles.



Automotive Glazing – Laminating

Laminated Glass:

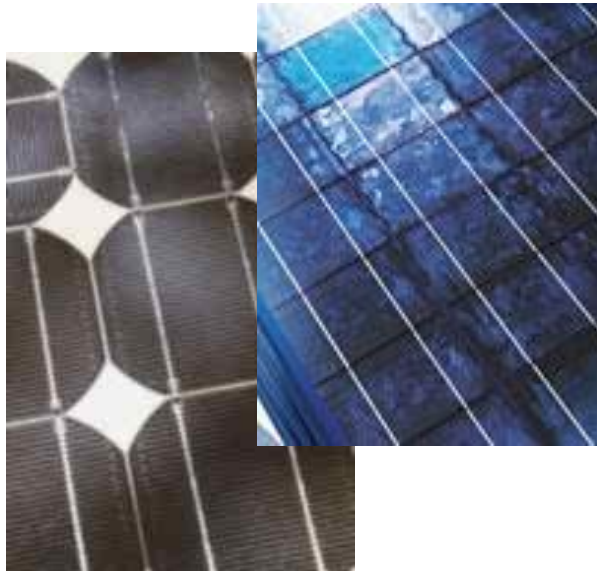
Laminated glass consists of two pieces of glass with a sandwich of transparent plastic interlayer. This is then placed into an air-pressure autoclave, and treated at high temperature and pressure. Some special products are made with 3 or more sheets of glass. This glass is mainly used for the front windows of automobiles.



Solar Panels & Glass: Crystalline vs Thin Film

Crystalline Silicon Solar Panels

High efficiency, Chinese manufacturers



Low iron rolled glass
+AR (Anti Reflection)coating,
mainly for cover glass

Thin film solar panels

Total cost competitiveness, strength
in large size and high temperature
applications



TCO coated flat glass, forming
part of solar cell

Energy-saving Regulations

Growth opportunities with stricter energy-saving regulations

- In response to heightening calls for CO2 emission reduction, governments across the globe have been tightening building energy-saving regulations and introducing zero-emission building targets.
- Behind in energy saving, the private sector including offices and houses are now adopting more functional windows such as triple glazing with low e coating instead of double glazing or single pane windows. Windows equipped with photovoltaics (BIPV) may pave its way into buildings soon.

<Zero Energy Building Targets>

Japan (Commercial buildings)

- 2020: All new public buildings
- 2030: Net zero of total of new buildings

Japan (Houses)

- 2020: All new standard houses
- 2030: Net zero of total new houses



BIPV (Building Integrated Photovoltaics)



Spacia™ (Vacuum glazing)

USA

- 2030: All new commercial buildings
- 2050: All commercial buildings

EU

- 2018: All new public buildings
- 2020: All new buildings

UK

- 2016: All new houses
- 2018: All new public facilities
- 2019: Zero carbonization for all commercial buildings

2. Class A Shares

Class A Shares Detail

Redeem Class A Shares at the earliest possible timing, while maintaining financial stability

Amount (No of Shares)		JPY40 billion (40,000 shares) *Number of outstanding shares after redemption as of March 2020: 30,000 (Issued value: JPY30,000m)				
Planned Allottees (Amount & No of shares)		Japan Industrial Solutions Fund II		JPY20 billion (20,000 shares)		
		UDS III Corporate Mezzanine Limited Partnership		JPY10 billion (9,000 shares)		
		UDS IV Corporate Mezzanine Limited Partnership		JPY10 billion (11,000 shares)		
Voting Rights		None				
Preferred dividend rate (Cumulative)		31 March 2017 ~ 31 March 2018		4.5%		
		1 April 2018 ~ 31 March 2020		5.5%		
		1 April 2020 ~		6.5%		
Call option (Comp- any's option)	Consi- deration	Cash	Put option (Planned Allottees' option)	Consi- deration	Ordinary Shares	
	Redemp- tion	1 April 2018 or later		Redemp- tion	1 July 2020 or later, unless conversion restriction removal reason exists *A conversion restriction removal reason occurred on 22 May 2020	
	Redemp-tion Amount per share	Paying-in amount per share + cumulative accrued dividend amount + daily prorated accrued preferred dividend amount + redemption premium <Redemption premium> 1 April 2018 ~ 30 June 2018 : 1.08 1 July 2018 ~ 30 June 2019 : 1.15 1 July 2019 ~ 30 June 2020 : 1.22 1 July 2020 ~ 30 June 2021 : 1.29 1 July 2021 ~ 30 June 2022 : 1.36 1 July 2022 ~ : 1.43		No. of Ordinary Shares to be Issued per Class A Share	(Paying-in amount per share X ordinary share redemption premium) / acquisition price <Ordinary share redemption premium> 1 April 2017 ~ 30 June 2017 : 1.05 1 July 2017 ~ 30 June 2018 : 1.08 1 July 2018 ~ 30 June 2019 : 1.15 1 July 2019 ~ 30 June 2020 : 1.22 1 July 2020 ~ 30 June 2021 : 1.29 1 July 2021 ~ 30 June 2022 : 1.36 1 July 2022 ~ : 1.43	
Design		<ul style="list-style-type: none">The Planned Allottees may exercise their put option for 4,000 or less Class A Shares, when the Company notifies the exercise of its call option for the entire outstanding Class A Shares.				

3. Financial Data

Financial Data (1)

		FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
Assets	¥ billion	926.2	920.1	812.1	790.2	788.6	761.9	765.2
Interest-bearing debt		455.3	442.7	437.0	399.4	372.7	371.5	435.0
Shareholders' equity		184.0	175.7	103.1	124.1	135.2	123.8	73.6
Called up share capital		116.4	116.4	116.4	116.5	116.5	116.5	116.6
Net debt		379.1	374.1	381.0	313.3	306.5	317.7	390.2
EBITDA		54.4	57.8	60.3	62.1	63.6	64.7	55.0
Net debt/EBITDA		7.0x	6.5x	6.3x	5.0x	4.8x	4.9x	7.1X
Net debt/Equity ratio		2.0x	2.0x	3.4x	2.3x	2.1x	2.4x	4.4X
Shareholders' equity ratio	%	19.9%	19.1%	12.7%	15.7%	17.1%	16.2%	9.6%
Trading profit ratio	%	3.7%	4.0%	4.3%	5.7%	6.3%	6.3%	4.1%
Net cash flows from operating activities	¥ billion	17.9	24.6	21.8	30.4	34.7	29.0	30.4
Net cash flows from investing activities		-17.1	-23.2	-26.4	-10.2	-17.9	-28.1	-56.9
Cash flow before financing activities		0.8	1.4	-4.6	20.3	16.8	0.9	-26.4
Capital expenditures		31.6	36.6	28.2	28.0	35.5	32.2	-67.0
R&D costs		7.9	8.2	9.8	8.5	9.1	9.4	9.0
Depreciation and amortization		40.4	41.7	40.9	32.2	29.4	27.9	34.8

Numbers of shares outstanding (common stock*1)	K	903,551	903,551	903,551	90,366	90,487	90,594	90,642
Earnings per share*1	¥	-18.4	1.9	-55.2	62.0	48.3	115.2	-236.0
Book value per share*1	¥	203.78	194.6	114.14	941.76	1042.72	978.5	470.9
Cash dividends Yen*1	¥	0	0	0	0	20	20	-
Stock price (High)	¥	154	149	142	951	1080	1315	965
Stock price (Low)	¥	90	94	64	600	743	767	282

*1: Effective as from 1 October 2016, the Company conducted a share consolidation in which every ten common shares

Note: Early IFRS adaption since FY2011

Financial Data (2)

		FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
Revenue	¥ billion	606.1	626.7	629.2	580.8	598.9	612.8	556.2
Architectural		240.6	252.9	262.6	237.7	238.0	247.3	233.7
Automotive		305.1	314.0	316.3	296.6	311.4	314.6	281.0
Technical Glass		59.4	58.7	49.5	46.1	48.4	49.1	40.1
Others		1.0	1.1	0.8	0.4	1.1	1.7	1.4
Trading profit	¥ billion	22.4	25.2	27.2	33.1	37.7	38.8	23.0
Operating profit	¥ billion	14.6	16.8	19.4	29.9	35.6	36.9	21.2
Architectural		11.0	17.0	24.6	27.0	26.2	25.8	17.3
Automotive		11.2	9.4	9.8	12.7	14.2	15.1	6.1
Technical Glass		5.9	4.9	0.3	1.8	5.4	8.1	7.1
Others		-13.4	-14.5	-15.3	-11.6	-10.2	-12.1	-9.4
Operating profit ratio to revenue	%	2.4%	2.7%	3.1%	5.1%	5.9%	6.0%	3.8%
Architectural		4.6%	6.7%	9.4%	11.4%	11.0%	10.4%	7.4%
Automotive		3.7%	3.0%	3.1%	4.3%	4.6%	4.8%	2.2%
Technical Glass		9.9%	8.4%	0.5%	3.8%	11.2%	16.4%	17.7%
Exceptional items	¥ billion	-13.8	5.5	-35.1	2.9	-1.3	-7.1	-24.0
Finance expenses (net)		-16.9	-17.9	-18.2	-19.2	-14.6	-13.3	-11.8
Share of JVs and associates		1.0	0.4	-3.4	1.1	2.4	6.2	1.1
Income before income taxes/Profit before taxation		-15.1	4.8	-37.4	14.8	22.1	22.7	-13.5
Net income/Profit attributable to owners of the parent		-16.6	1.7	-49.8	5.6	6.2	13.3	-18.9

Note: Early IFRS adaption since FY2011

Financial Data (3) – Exchange rate trend -

Average rates used

	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
GBP	159	177	181	142	147	146	138
EUR	134	139	132	119	130	129	121
USD	100	110	120	108	111	111	109
BRR	44.4	44.5	33.5	32.8	34.4	29.4	26.4
ARS	16.27	13.10	11.35	7.22	6.30	–	–

Closing rates used

	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
GBP	171	178	161	139	150	144	133
EUR	141	130	127	119	132	124	119
USD	103	120	113	111	106	111	108
BRR	45.5	37.3	31.3	35.5	32.1	28.3	20.8
ARS	12.84	13.66	7.69	7.24	5.30	2.53	1.68

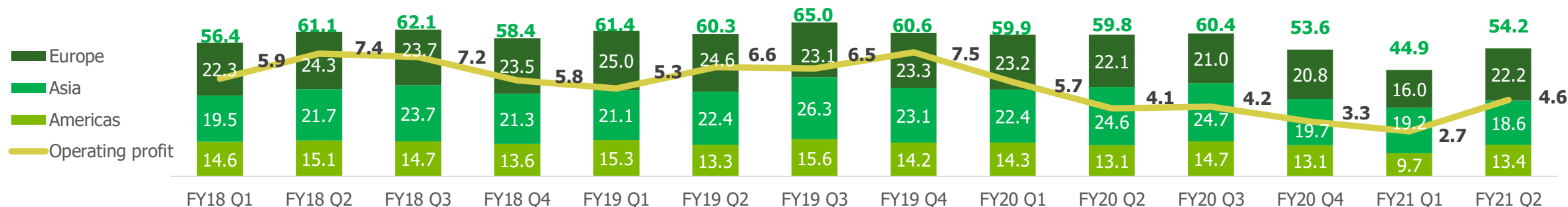
FX Sensitivity

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

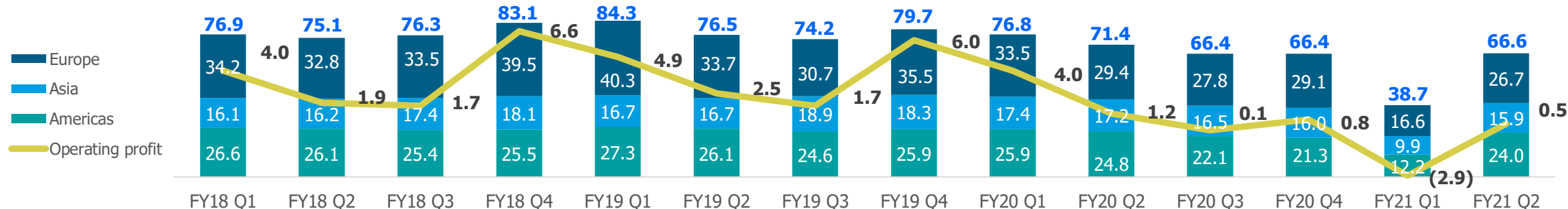
(JPY bn)	FY2017	FY2018	FY2019	FY2020
Equity	(3.5)	(3.5)	(3.3)	(3.1)
Profit for the period	(0.2)	(0.1)	(0.2)	0.1

Revenue & Trading Profit – Quarterly Trend

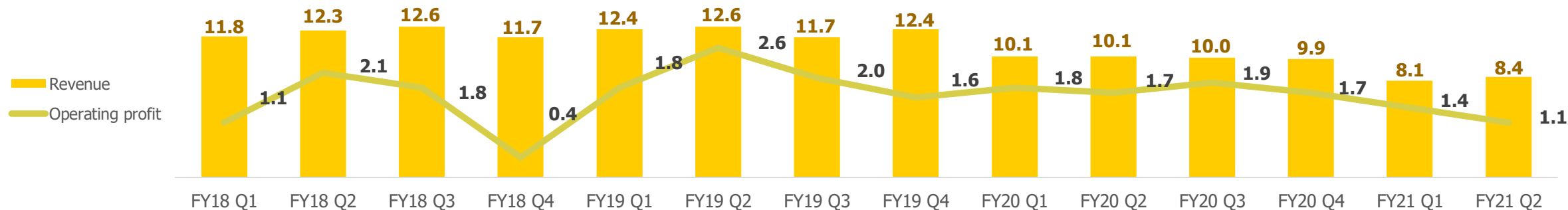
Architectural



Automotive



Technical Glass



NSG

GROUP