

# ANNUAL REPORT 2013 FISCAL YEAR ENDED 31 MARCH 2013

'MAKING A DIFFERENCE TO OUR WORLD THROUGH GLASS TECHNOLOGY'





# THE NSG GROUP IS ONE OF THE WORLD'S LARGEST MANUFACTURERS OF GLASS AND GLAZING PRODUCTS FOR THE ARCHITECTURAL, AUTOMOTIVE AND TECHNICAL GLASS SECTORS.

With around 28,000 permanent employees, we have principal operations in 30 countries and sales in over 130.

Geographically, just over a third of our sales are in Europe, around a third in Japan and the rest primarily in North and South America, South East Asia and China.

We operate in three main sectors:

**Architectural** supplies glass for buildings and Solar Energy applications.

**Automotive** serves the original equipment, aftermarket replacement and specialized transport glazing markets.

**Technical Glass** products include very thin glass for displays, lenses and light guides for printers, and glass fiber, used in battery separators and engine timing belts.

**Cover photographs** 

Top: Pilkington Planar™ structural glazing in the University of Southern California Stem Cell Research Building. Picture courtesy W&W Glass, LLC.

**Bottom left:** Global vehicle launches in all regions supported by NSG Group in FY2013 included the Honda CR-V. *Picture courtesy Honda Motor Europe Limited.* 

**Bottom right:** NSG Ultra Fine Flat (UFF®) glass is used for touch screens on mobile phones and tablet pcs.

# FINANCIAL HIGHLIGHTS

#### Revenue Millions of yen

521,346 2012: 552.223

Loss before taxation Millions of yen

period Millions of yen (29,068)(31, 939)

2012: (4,822)

**Total assets** 

885,436

Millions of yen

2012: 848,752

Number of employees Permanent

Trading profit\*

Millions of yen

8,986

Loss for the

2012: (1,749)

2012: 14,904

27,932

2012: 29,702

\* Operating profit before exceptional items and the amortization of intangible assets arising on the acquisition of Pilkington plc.

# **OPERATIONAL HIGHLIGHTS**

- Results reflect low levels of activity in the Group's major markets
- Challenging market conditions persist, but signs of improvement in some areas
- Profit improvement program ahead of target
- Significant improvement in cash flow performance
- Management will continue to focus on returning the Group to profitability.

# CONTENTS

Overview Financial and operational highlights Business overview To our shareholders Our global operations	01 02 04 08	
Our business Review of operations Architectural Automotive Technical Glass	10 14 16 18	

#### **Financial performance**

Chief Financial Officer's review Consolidated financial highlights



20

24

Our business

Financial performance

Corporate information

#### **Corporate information**

25
26
27
28

#### Important notes about this document

The NSG Group adopted International Financial Reporting Standards (IFRS) for the first time in FY2012 (commencing on 1 April 2011 and ending on 31 March 2012). The change to IFRS has meant that the Group is publishing more detail on its performance than in previous years. Consequently, we decided to split our financial reporting between two documents: the Annual Report and the Annual Financial Statements. Both documents are available as downloads from our website at www.nsg.com. In order to obtain a full understanding of the performance of the Group, both documents should be consulted.

> NSG Group Annual Report 2013 01

OVERVIEW	
OUR BUSINESS	10
FINANCIAL PERFORMANCE	20
CORPORATE INFORMATION	25

# **BUSINESS OVERVIEW**

WE OPERATE THREE BUSINESS LINES: ARCHITECTURAL, SUPPLYING GLASS FOR THE WORLD'S BUILDINGS AND SOLAR ENERGY; AUTOMOTIVE, PRODUCING GLASS AND GLAZING SYSTEMS FOR VEHICLES WORLDWIDE; AND TECHNICAL GLASS IN NICHE SECTORS.

# Architectural

#### A leader in architectural glazing and Solar Energy products

#### Financial year in review

- Results were below the previous year, with volumes significantly down.
- Impact of restructuring actions beginning to more than offset deteriorating market conditions.
- Solar Energy dispatches were significantly below the previous year.

#### Financial highlights by business

		Millions of yen
	2013	2012
Revenue	215,739	239,440
Operating profit*	303	9,135
Net trading assets	142,594	160,915
Capital expenditure	10,742	14,137

# **Automotive**

# Supplying every major vehicle manufacturer in the world

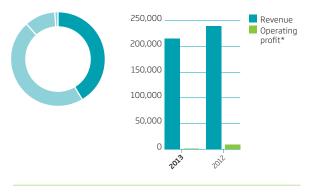
#### Financial year in review

- Automotive revenues fell from the previous year.
- Significant decline in volumes in Europe, where light vehicle demand fell to lowest level for 15 years.
- European decline partly offset by relatively strong demand in Japan and North America.

#### Financial highlights by business

		Millions of yen
	2013	2012
Revenue	245,022	251,229
Operating profit*	4,755	5,123
Net trading assets	153,609	165,908
Capital expenditure	13,491	18,818

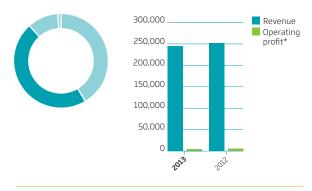
#### Group revenue and operating profit



42%

Percentage of total Group revenue \* Before exceptional items.

#### Group revenue and operating profit



47%

Percentage of total Group revenue \* Before exceptional items.

#### **Consolidated revenue**

By business





37%
30%
15%
18%

# **Technical Glass**

# World leader in thin display glass and optical devices for office machinery

#### Financial year in review

- Revenue and profits similar to the previous year.
- Demand for thin glass for displays remains stable.
- Customer demand in smart phone and tablet sectors generally positive.



🔵 Europe

🔵 Japan

North America

Rest of World

#### Financial highlights by business

		Millions of yen
	2013	2012
Revenue	59,404	60,167
Operating profit*	6,719	6,942
Net trading assets	45,199	47,364
Capital expenditure	1,669	1,532

# 1120

Percentage of total Group revenue \* Before exceptional items.

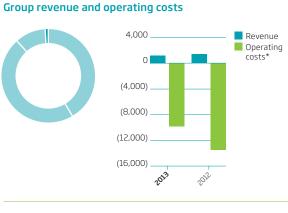
# Other

#### **Financial year in review**

- 'Other' 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.
- Operating costs incurred in Other fell from the previous year, due to cost savings and some non-recurring gains.

#### Financial highlights by business

		Millions of yen
	2013	2012
Revenue	1,181	1,387
Operating costs*	(9,831)	(13,484)
Net trading assets	1,818	(617)
Capital expenditure	84	194



<1%

Percentage of total Group sales \* Before exceptional items.

OVERVIEW	
OUR BUSINESS	10
FINANCIAL PERFORMANCE	20
CORPORATE INFORMATION	25

# TO OUR SHAREHOLDERS

WE AIM TO BE THE GLOBAL LEADER IN INNOVATIVE HIGH-PERFORMANCE GLASS AND GLAZING SOLUTIONS, CONTRIBUTING TO ENERGY CONSERVATION AND GENERATION, WORKING SAFELY AND ETHICALLY.

"During FY2013, we experienced low levels of activity in our major markets. Challenging trading conditions are expected to persist, but we are seeing tentative signs of improvement in some areas.

Our restructuring program is continuing according to plan, with benefits ahead of target. As a result of these actions, our profitability has steadily improved through the year.

Management will continue to focus on returning the Group to profitability."



Seiichi Asaka Chairman of the Board, left Keiji Yoshikawa President and Chief Executive Officer, right

#### **Business results**

In the fiscal year under review, the Group continued to experience challenging conditions in its main markets, with volumes below the levels of the previous year. Cumulative Group revenues were ¥521,346 million, 6 percent below the level of the previous year. Excluding exceptional items and the amortization arising on the acquisition of Pilkington, the Group made a trading profit of ¥8,986 million (¥14,904 million in FY2012).

European Architectural volumes were significantly below the previous year, but were stable at relatively low levels in the fourth quarter. Automotive markets were below the previous year, although North American volumes improved further. Technical Glass markets were relatively robust, at levels similar to the previous year.

Cumulative Group revenues were ¥521,346 million; 6 percent below the level of the previous year. Excluding exceptional items and the amortization arising on the acquisition of Pilkington, the Group made a trading profit of ¥8,986 million (¥14,904 million in FY2012).

In Europe, economic difficulties continued to depress construction and refurbishment activity, with the fourth quarter also affected by harsh winter weather conditions. Price declines only stopped at the end of the fiscal year.

Automotive markets were also challenging, with low levels of consumer demand leading to reductions in vehicle production. AGR markets were flat, impacted by the fourth quarter weather conditions.

In Technical Glass markets, volumes of glass cord for engine timing belts were below the previous year, consistent with conditions experienced in the Automotive business.

In Japan, underlying conditions in construction markets continued to improve gradually, with new housing starts approximately 5 percent higher than in the previous year, although unfavorable winter weather conditions had a negative impact on demand during the fourth quarter. In Automotive, domestic vehicle purchases, which had been relatively robust earlier in the year, declined during the third and fourth quarters. The weakening Japanese yen provided support to vehicle exports towards the end of the year. AGR markets were stable with demand levels similar to the previous year. Technical Glass markets were robust, with strong demand for components for consumer electronic devices. In North America, Architectural markets steadily improved during the year, but are still significantly below the level of 2008. Automotive light vehicle build also improved during the year, with the increased volumes continuing into the fourth quarter. Market conditions in AGR were in line with the previous year.

In the Rest of the World, the Group's Architectural markets in South America continued to grow, albeit relatively slowly. Architectural markets in South East Asia improved towards the end of the year. In Automotive markets, light vehicle build volumes were ahead of the previous year, while AGR markets were stable.

Our profit improvement programs are well advanced and since our initial announcement in February 2012 we have introduced additional measures and accelerated restructuring activities.

#### **Strategic direction**

We are executing our strategy through a market-facing regionally organized business, based on three business areas: Architectural, Automotive and Technical Glass. A good balance between regional and global organizational structures will drive efficiency and allow us to react quickly to market developments.

Our immediate priority is to improve the profitability of the Company and earn the trust of our stakeholders through our achievements. Our profit improvement programs are well advanced, and since our initial announcement in February 2012 we have introduced additional measures and accelerated restructuring activities.

We are examining carefully all aspects of our current asset base. Our objective is to right-size our business urgently and to accomplish this within FY2014. We aim to improve manufacturing performance through efficiency improvements and rationalization. We have been quick to take action to adjust our capacity to demand, through temporary and permanent closures of plants.

As described by Clemens Miller, COO, in the Review of Operations, the immediate priority of the management team is to accelerate the program of actions announced in February 2012 to improve profitability and enhance operational efficiencies.

Our restructuring programs and efficiency enhancements are being increasingly realized. In FY2013 our restructuring program savings were approximately double the amount previously targeted and our profitability improved steadily through the year.

#### Financing

Improvement of the Group's financial strength is key to the attainment of our strategic objectives. On 28 March 2013, the Group announced new financial facilities. These included a syndicated loan facility of ¥70,000 million, arranged by Sumitomo Mitsui Banking Corporation, new bilateral finance agreements of ¥9,000 million, and a further bank facility of ¥30,000 million. In addition, a new committed revolving credit facility of ¥25,000 million was signed with Sumitomo Mitsui Banking Corporation, which is intended to provide additional liquidity.

#### **Dividend policy**

The Group's dividend policy is to secure dividend payments based on sustainable business results. As a consequence of the current market conditions faced by the Group, and the loss recorded for the year, the directors do not recommend a dividend for the year to 31 March 2013.

We recognize the importance of dividends to our shareholders and anticipate resuming dividend payments when the financial performance of the Group allows.

#### The Board and senior management

In March 2013, the Group announced the retirement as Chairman of the NSG Group of Katsuji Fujimoto and that of Tomoaki Abe as Vice-Chairman, to take effect from 1 April 2013. Concurrently, the appointment of Seiichi Asaka (an independent external director) as Chairman of the Board of Directors was announced.

Following the 147th Ordinary General Meeting of Shareholders, held on 27 June 2013, Katsuji Fujimoto and Tomoaki Abe retired from the Board of Directors. We take this opportunity to thank them for their contribution during their extensive careers with the Company.

The Shareholder Meeting also confirmed the appointment of Kenichi Morooka, Executive Officer and Executive Vice President, as a Director of the Company.

Following recent appointments, the Board now comprises eight directors, of which four are independent external directors. All of the Group's Board committees are now chaired by an independent external director.

#### **Corporate governance**

In March 2013, we announced the appointments of George Olcott, an independent external director, as Chairman of the Nomination Committee and Hiroshi Komiya, an independent external director, as Chairman of the Compensation Committee. Sumitaka Fujita, also an independent external director, retains the chairmanship of the Audit Committee.

Following these changes, the Board now comprises eight directors, of which four are independent external directors. All Board committees are now chaired by an independent external director.

These appointments build on initiatives taken by the Group over the past few years to further strengthen corporate governance. We believe these developments mark further progress towards the achievement of the advanced level of corporate governance we regard as key to the sustainable growth of the Group.

Corporate governance has been further strengthened during the year. Reflecting changes in legislation in some of the jurisdictions in which we operate, we have also reviewed and further clarified Group rules intended to address potential bribery and corruption risks, with the publication of a Group Anti Bribery/ Anti Corruption Manual.

All NSG Group directors, officers and employees must strictly adhere to the standards defined in the Manual to avoid bribery and corruption related risks. The Manual also applies to the Group's investments and interests in joint ventures and joint projects and other comparable business partnerships and arrangements in which the NSG Group is participating.

OVERVIEW CONTINUED	
OUR BUSINESS	10
FINANCIAL PERFORMANCE	20
CORPORATE INFORMATION	25

#### **Employees**

Our management philosophy, 'people are the most important asset of our company', is deeply rooted in the 400-year-old Sumitomo Spirit to which we subscribe. It has therefore been a cause of great regret that the initiatives we have had to take over the past year required significant headcount reductions, with some 3,000 people having left the Group since the initiation of the programs.

Following the recent reductions, the Group now has around 28,000 permanent employees, operating in 30 countries and speaking over 25 languages. Just over 40 percent of Group employees work in Europe, 17 percent in Japan, 15 percent in North America and just over 25 percent in the rest of Asia and South America.

Our policy is to put the best person in each job, regardless of nationality or region. We have identified specific challenges in attracting and retaining talent, particularly in emerging markets, and we are already putting in place measures to address these.

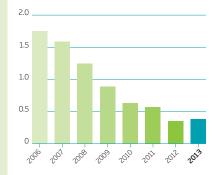
Employee engagement is being given a high priority, with continuing training for managers and supervisors in communication skills and additional briefings to keep employees informed of developments. We continue to promote the health and wellbeing of our people.

Over the past year, in line with best practice, we have further strengthened our Reporting of Concerns procedures, which allow employees to report any concerns. Our external partner, Global Compliance Inc., operates a worldwide telephone Reporting Line and web portal system, which is available to all employees, 24 hours a day, every day of the year.

#### Safety

Safety at work is a priority for the Group. Our safety programs emphasize the importance of individuals taking personal responsibility and of appropriate safe behavior. All injuries at work are regarded as unnecessary and avoidable. We require full reporting no matter how minor, and appropriate investigation to ensure we learn from all such incidents.

#### Significant Injury Rate (SIR)



#### **Reporting of Concerns procedures**

Over the past year, in line with best practice, we have further strengthened our Reporting of Concerns procedures, which allow employees to report any concerns.

Our external partner, Global Compliance Inc., operates a worldwide telephone Reporting Line and web portal system, which is available to all employees, 24 hours a day, every day of the year.



Supporting posters and handouts explaining the new arrangements have been distributed to Group employees in all languages used throughout the Group.

The Significant Injury Rate (SIR) is our primary reactive indicator. This 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.

Over the past year, we had 159 Significant Injuries (54 of them resulting in time lost from work). The SIR for FY2013 of 0.38 represents a 9 percent deterioration in safety performance compared to FY2012. The figure suggests that measures taken to support changes of personnel or equipment, due to the elimination and consolidation of sites and production lines, were insufficient. Counter measures are in place to ensure that the figure improves in FY2014.

#### **Sustainability**

We produce high-quality glass products, primarily for the architectural, transport and technical sectors. These products make an important contribution to improving living standards, to people's safety and wellbeing, and to the conservation of energy worldwide.

Our Sustainability policy sets out our overall approach to sustainability. A detailed Environmental policy then defines in more detail our approach to the environment and environmental management within the framework of our Sustainability policy.

We aim to achieve our sustainability objectives by balancing the needs of all our stakeholders, managing the environmental impacts of our activities, developing our people, encouraging innovation in processes and products, working in harmony with the communities in which we operate and encouraging our customers, contractors and suppliers to do the same.



#### Far left

The 2012 NSG Group Sustainability Report can be downloaded from our website. The 2013 edition will be available in February 2014.

#### Left

14 November 2012 saw the second NSG Group Safety Day, designed to bring special focus to this important area in all our plants around the world.

Our policies underline the contribution our products can make to addressing climate change. We are also committed to improving our own energy usage and resource management. We aim to make a positive environmental contribution to the value chains in which we operate, while benefiting from the growing international demand for our products that help save and generate energy. Glass has an important contribution to make in helping to reduce greenhouse gas emissions. We work with stakeholders in the framing of policies and regulations to help improve energy efficiency through the use of glass.

Over the past year, we made further progress in embedding the principles of sustainability within the NSG Group. In 2012, we took the decision to join the UN Global Compact and to support the advancement of its 10 principles. We consider these to be a natural extension of our Code of Conduct, which defines our commitment to social and environmental responsibility.

Our principal Sustainability targets and the progress we have made so far towards their attainment are covered in our 2012 Sustainability Report and on our website.

With the planned completion of the restructuring phase by the end of FY2014, we are aiming to move into a new stage of profitable growth in FY2015.

#### **Management principles**

The fundamental principles of the Group's basic management policy are ensuring open and fair business dealings, adhering to corporate ethical standards, and contributing to the resolution of global environmental issues; all aimed at establishing a company with a spirit of innovation and a global presence, maximizing value for all stakeholders.

In all our actions, we will not lose sight of our core Values and Principles, with Safety and Quality remaining top priorities. We aim to be a sustainable company in all senses of the word. Good management of our people, our resources, our communities and our environment also makes good business sense.

#### Prospects

Our business continues to be affected by concerns about Europe's economic future, by turmoil in the Solar Energy markets and by overcapacity in many markets. The restructuring and profit improvement programs we launched in February 2012 have been accelerated and the benefits are beginning to show through.

Management will continue to focus on returning the Group to profitability, with headline profit improvement driven by additional savings from our restructuring programs.

Although times are undoubtedly challenging for our company at the moment, we remain optimistic about the longer-term future of the NSG Group. We operate in a good industry with positive prospects, but we must ensure we are cost competitive.

We are aiming to lower the breakeven point of our business by reducing overheads, improving manufacturing efficiency and controlling our input costs through best-in-class procurement and shared services. We aim to ensure that we spend our limited resources wisely and generate capacity at much lower capital costs. With the planned completion of the current restructuring phase by the end of FY2014, we are aiming to move into a new stage of profitable growth in FY2015.

The NSG Group kindly requests the steadfast understanding and input of all our shareholders.

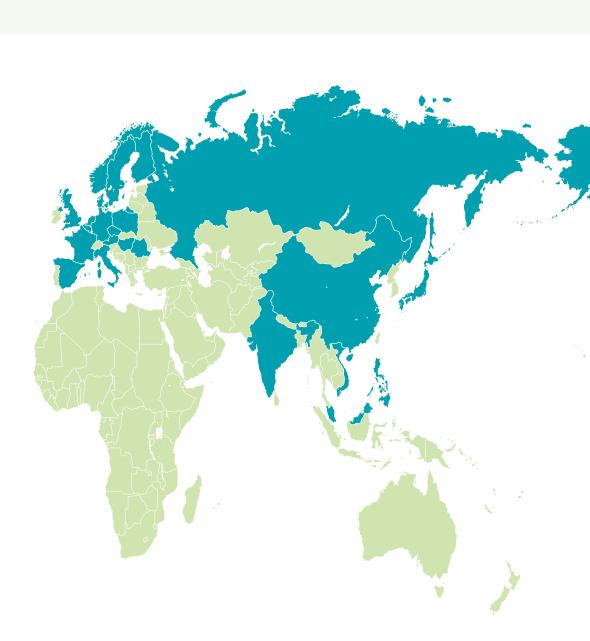
**Seiichi Asaka** Chairman of the Board

Keiji Yoshikawa President and CEO

OVERVIEW CONTINUED	
OUR BUSINESS	10
FINANCIAL PERFORMANCE	20
CORPORATE INFORMATION	25

# OUR GLOBAL OPERATIONS OUR OPERATIONS SUPPORT A WORLDWIDE CUSTOMER BASE. WE HAVE PRINCIPAL OPERATIONS IN 30 COUNTRIES, EMPLOYING AROUND 28,000 PEOPLE AND MARKETING OUR PRODUCTS IN OVER 130 COUNTRIES.

- Argentina
- Austria
- Belgium
- Brazil
- Canada
- Chile
- China
- ColombiaCzech Republic
- Denmark
- Finland
- France
- Germany
- Hungary
- India
- Italy
- Japan
- Malaysia
- Mexico
- Netherlands
- Norway
- Philippines
- Poland
- Romania
- Russia
- Spain
- Sweden
- United Kingdom
- United States
- Vietnam



### Architectural

#### Manufacturing

World leader in float glass technology and coatings

Principal operations in 21 countries. Overall, the Group manages, or has a stake in, 48 float lines around the world (some of which are dedicated to Automotive and Technical Glass production).

#### **Global spread**

Major presence in Europe, Japan and North America. Also present in China, South America and South East Asia.

### **Automotive**

#### Manufacturing

Supplying the world's leading vehicle manufacturers

Principal fabrication facilities at 31 sites in 16 countries. Major presence in Europe, Japan, North America, South America and China.

#### **Global spread**

Leading share of the global Original Equipment (OE) and Specialized Transport markets. Largest player globally in Automotive aftermarket glazing distribution and wholesale.

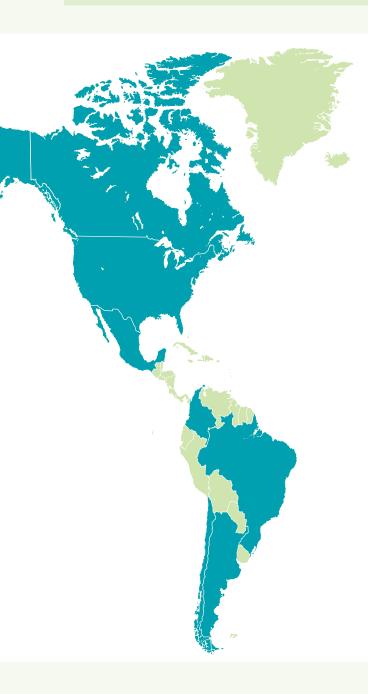
### **Technical Glass**

#### Manufacturing Producing the world's thinnest float glass

Major fabrication facilities in Japan, China, the Philippines and Europe.

#### **Global spread**

World leader in thin display glass, optical devices for office machinery and glass fiber products.



#### Europe 11,700 employees

- 10 float lines
- Two rolled plate furnaces
- Automotive OE plants in seven countries
- Architectural downstream in 10 countries
- Extensive AGR network
- Technical Glass operations
  in UK

#### North America 4,000 employees

- Six float lines
- Automotive OE in US, Canada and Mexico
- Extensive AGR network in US and Mexico
- Technical Glass operations in Canada

#### S & SE Asia 3,000 employees

- Four float lines
- Two Automotive plants
- Technical Glass operations

#### Japan 4,600 employees

- Four float lines
- One rolled plate line
- Architectural downstream network
- Automotive OE plants and AGR network
- Technical Glass operations

#### South America 2,800 employees

- Eight float lines
- Architectural downstream operations
- Automotive OE in Brazil and Argentina
- AGR network

#### China 1,800 employees

- 16 float lines
- Two Automotive plants
- Technical Glass operations
- Rolled glass for photovoltaics

DVERVIEW	01
OUR BUSINESS	
FINANCIAL PERFORMANCE	20
CORPORATE INFORMATION	25

# REVIEW OF OPERATIONS THE BENEFITS OF OUR RESTRUCTURING PROGRAMS AND EFFICIENCY ENHANCEMENTS ARE BEING INCREASINGLY REALIZED. PROFIT IMPROVEMENT REMAINS OUR NEAR-TERM STRATEGIC FOCUS, TAKING PRECEDENCE OVER GROWTH FOR THE IMMEDIATE FUTURE.

"We have maintained our operational focus on restructuring, which includes an emphasis on indirect costs. A range of actions has been taken during the year to reduce our overhead cost base. The benefits of our accelerated profit improvement and efficiency programs are beginning to be reflected in our results, helping to offset the effects of continuing challenging trading conditions in our global markets.

We have implemented headcount reductions and plant closures, designed to reduce our cost base and rebalance our global footprint. In parallel, we have moved forward with selected strategic investments and launched new value-added products."



Clemens Miller Chief Operating Officer

#### **Management priorities**

Our clear priority is to implement and accelerate programs to improve profitability and enhance operational efficiencies. These measures, which include capacity rationalization and headcount reduction, are intended to protect the business in the short term and also to re-establish profit growth. The program also includes an emphasis on indirect costs, and a range of actions has been taken during the year to reduce our overhead cost base.

The benefits of our accelerated profit improvement and efficiency programs are beginning to be reflected in our results, helping to offset the effects of continuing challenging trading conditions in our global markets.

We have implemented headcount reductions and selected plant closures designed to reduce our cost base and rebalance our global footprint. In parallel we have moved forward with selected strategic investments and launched new value-added products.

#### **Restructuring and profit improvement initiatives**

In May 2012, we announced an acceleration of the capacity rationalization and headcount reduction program originally launched in February 2012. Our objective is to complete it within two years rather than three as originally anticipated.

We have closed our European Architectural float lines in Sweden and Italy. Additionally, two lines were temporarily idled; one each in Germany and the UK. We have completed consultations with employee representatives regarding the closure of Automotive sites in Sweden and Finland and expect to conclude these closures in FY2014. We have also closed, or are in the process of closing, eight sites in our Architectural downstream business in Europe.

These actions have led to a significant reduction in the Group's European capacity As a result of the capacity reductions and also the focus on overhead costs, as at 31 March 2013, 3,000 people had left the Group.

# Our business

#### **Architectural**

# Representing 42 percent of Group sales, the Architectural business improved during the fourth quarter, although profitability remains relatively weak.

Architectural volumes were significantly below the previous year, but the rate of decline slowed during the year, with fourth quarter demand relatively stable at low levels of activity.

In Europe, revenues and profits fell from the previous year. Losses narrowed during the year, however, as restructuring actions significantly reduced our European cost base. Excluding Solar Energy dispatches, cumulative Architectural volumes fell by around 12.5 percent from the previous year, leading to industrywide overcapacity and weak pricing.

Revenues in Japan were below the previous year, with improving domestic markets being more than offset by reduced dispatches of Solar Energy glass. Underlying sentiment in the construction sector continued to improve, with new housing starts up by approximately 5 percent from the previous year.

In South America, a fifth float line in Brazil, operated by our Cebrace joint venture, started up in April 2012. In Colombia, a joint venture float line started operation in April 2013.

In North America, revenues and profits were below the previous year. Dispatches of Solar Energy products fell, more than offsetting improving domestic construction markets. North American construction markets showed improvement, especially in the second half of the fiscal year, led by a rebound in the housing market.

# New off-line coater extends energy-saving glass range

Commissioned in November 2012, the Group's off-line coater, at St Helens, UK is one of the most advanced facilities of its type in the world. It enables ultra-thin special coatings to be applied to glass, creating a range of high performance energy-saving Architectural glazing products.

Off-line coater at Cowley Hill UK.



#### Pilkington Suncool™

Pilkington Suncool™ combines high light transmittance, good solar control and low emissivity in an off-line coated glass. The product features in the striking Food Technology and Food Service Institute, Lomza, Poland.



In the Rest of the World, revenues improved from the previous year with a full period of sales generated by the Group's Solar Energy float line in Vietnam, which started production during the previous year. Volumes in South America were similar to the previous year. The Group's Solar Energy rolled line in China experienced weak demand throughout the year.

To maintain our market leadership in South America, we continue to invest in new float lines with our joint venture partners in the region. A fifth float line, operated by Cebrace, our joint venture with Saint Gobain, started up in April 2012 and a joint venture float line in Colombia started operation in April 2013.

Our value-added products, such as low-e glass, solar control glass and glass for photovoltaics have the principal purpose of reducing energy consumption in buildings and generating energy from the sun. In Europe, in particular, we continue to focus on new product development. Introductions during the year included Pilkington Suncool™ pro T, Pilkington K Glass™ N, Pilkington Optiwhite™ S Premium, and NSG TEC™ 6/10.

In the UK, the Group has invested in an off-line coater, to meet the growing demand for energy-saving glass such as Pilkington K Glass<sup>™</sup> S, launched last year, and other value-added products. The project came on stream in November 2012 and manufacturing performance and sales have been highly successful.

We have also introduced improvements to our world-leading structural glazing system. Pilkington Planar™ Crystal Connect™ has been jointly developed by Pilkington Architectural and Dow Corning, a global leader in silicone-based technology. The product produces an uninterrupted glass façade, using a translucent structural silicone adhesive to create an invisible bond between the fixing and the glass.

OVERVIEW	01
OUR BUSINESS CONTINUED	
FINANCIAL PERFORMANCE	20
CORPORATE INFORMATION	25

# REVIEW OF OPERATIONS CONTINUED

#### Automotive

In Automotive (47 percent of Group sales) revenues fell from the previous year, reflecting a significant decline in volumes in Europe, where light vehicle demand fell to its lowest level for over 15 years.

In Automotive, revenues fell from the previous year, due largely to a significant decline in volumes in Europe, where light vehicle demand fell to its lowest level for over 15 years. This was partly offset by relatively strong demand in Japan, affected in the previous year by the March 2011 earthquake, and also in North America.

In the European Original Equipment (OE) sector, revenues and profits fell from the previous year, due to reduced demand. Results in the Automotive Glass Replacement (AGR) business were similar to the previous year, with reduced demand offset by an increasing proportion of sales of higher value-added products.

Japan saw cumulative OE revenues and profits higher than the previous year. In the second half of the year volumes were stable, but below the level of the previous year. AGR revenues and profits were similar to the previous year.

The first phase of our Automotive investment in Chmielów in Poland was opened in September 2012, increasing our windshield capacity by 1.7 million pieces a year.

In North America, OE revenues improved from the previous year, due to increased volumes, but profitability remains weak. AGR revenues and profits fell, with reduced market demand.

In the Rest of the World, local currency revenues were generally similar to the previous year. Profitability improved, but is still at a low level.

In September 2012, we opened our new plant in Chmielów, Poland, which increases our automotive windshield capacity by 1.7 million pieces a year, along with an expansion for delivering additional value-added products. Our Automotive expansion in Mexicali, which was completed this year, has increased our capacity in Mexico by around 30 percent, permitting the production of some 2.5 million car windshields a year. During the year we also started up our new sidelight line in Brazil, increasing our capacity there by around 7 million pieces.

#### Poland Automotive expansion on track

Our new Automotive plant in Chmielów in Poland, formally opened in September 2012, increases our automotive windshield capacity by 1.7 million pieces a year.



OE was involved in more than 40 vehicle launches worldwide. High-volume regional vehicles we are supplying include the Acura ILX in North America, Renault Clio in South America, Ford Kuga in Europe and the Mazda Axela in Japan. We also supported global vehicle launches in all regions, such as the Honda Accord and CR-V.

New technologies featured significantly, with switchable transmission rooflights, heated windshields, antenna systems and support for complex sensors such as Lane Departure Camera systems for both OE and Specialized Transport applications. Our AGR service network was enhanced in 2013 with the addition of new service center sites in Brazil, Mexico and Poland.

#### **Technical Glass**

Our Technical Glass business (11 percent of Group sales) maintains leading positions in niche specialist markets, in terms of both market share and technological superiority.

Revenues and profits in Technical Glass were similar to the previous year. Demand for thin glass for displays remains stable, with end-customer demand in sectors such as smart phones and tablet devices generally positive. Demand for components used in multi-function printers were similar to the previous year, but softened during the fourth quarter. Demand for glass cord used in engine timing belts fell in Europe, consistent with market conditions experienced in the Automotive business.

We are the world-leading supplier of Ultra Fine Flat (UFF®) glass, which is manufactured in a range of thicknesses from 1.1mm down to 0.3mm – the thinnest glass in the world to be made on a full-size float line. It is used for touch screens on mobile phones and tablets, small LCD displays and for cover glass to protect displays.

Responding to the market, we are doubling production of UFF® glass to meet the growth in demand. Planned projects will increase capacity as well as extending our capability to manufacture new and more challenging products. These include a full cold repair and major upgrade of a float line in Maizuru, Japan and a new line in Vietnam.

# Our business

#### High-tensile strength glass fiber cord investment

New investment in  $\overline{St}$  Helens, in the UK, is creating the first fully-integrated high-tensile strength glass fiber cord factory in Europe and the only such facility outside Japan.



To meet demand for ultra-thin glass used in touch screens on mobile phones and tablets and small LCD displays, we are doubling our production capacity.

The Group's proprietary Selfoc<sup>®</sup> Lens Array (SLA<sup>®</sup>) technology is playing a part in the development of a new generation of Light Emitting Diode (LED) print heads for office machinery. Selfoc<sup>®</sup> technology is being used in the new IPSiO SP C730 color LED printer by Ricoh.

Our advanced glass cord is used in a new generation of engine timing belts. NSG Glasscord® high-tensile strength glass fiber cord improves belt flexibility and stretch resistance significantly. Most recently, PSA Peugeot Citroën announced the adoption of timing belts incorporating the Group's glass cord for its three-cylinder Moteur EB engine.

During the year, we announced a significant investment at our Technical Glass facility in St Helens, UK. The site will become the first fully-integrated high-tensile strength glass cord manufacturing factory in Europe and the only such facility outside Japan.

#### **Technology and Engineering**

We remain committed to innovation as part of our recovery and future growth. New products and processes launched during the year have mostly been based on functional coatings and thin glass. These include new off-line coatings optimized for the UK market to support the launch of the new production line for energy-saving architectural products in the UK. We have also introduced improvements to the Spacia<sup>™</sup> vacuum glazing manufactured in Japan, launched an anti-condensation product in Europe and Virus Clean<sup>™</sup> anti-bacterial glazing in Japan. Our focus on restructuring actions will continue into FY2014. The pace of implementation has been accelerated and we continue to review actions to manage capacity and improve profitability.

Our TEC range of transparent conductive coatings has been expanded, in both product properties and geographically, for a wider variety of technical applications, including switchable glazing, commercial refrigeration and large interactive displays. Our conductive substrates for thin film solar cells have also been improved to enable our customers to achieve higher cell efficiencies.

Despite profit improvement measures involving cost reduction, we maintain a strong R&D and Intellectual Property function, now centrally organized. Spending on R&D in FY2013 was ¥7,267 million.

In FY2013, our Engineering team focused on two main areas: extending the life of operating assets to defer the need for investment in cold repairs, and building new facilities to give us new capabilities in key markets for the future.

#### Outlook

In FY2014, we expect activity in European markets to continue at a low level, although we do not anticipate a further significant decline in volumes. European Architectural prices, which ended FY2013 at historically low levels, are not expected to fall further. The pricing environment should be helped by industry-wide capacity reductions leading to an improved level of utilization.

In Japan, markets are expected to benefit from improving business sentiment, resulting from a weakening currency and growth-enhancing government policies. Volumes in North America should continue the improvement already experienced in FY2013, and volume growth is also expected in our emerging markets. Solar Energy dispatches are anticipated to be stable. Technical glass markets are likely to be broadly in line with FY2013 levels.

Since our initial announcements, the pace of implementation of our restructuring program has been accelerated. We continue to review actions to manage our capacity and improve profitability, examining all aspects of our current asset base.

The Group's operating profitability will increasingly benefit from the restructuring actions undertaken during FY2013, which will continue into FY2014.

#### **Clemens Miller** Executive Vice President

Chief Operating Officer

OVERVIEW	01
OUR BUSINESS CONTINUED	
FINANCIAL PERFORMANCE	20
CORPORATE INFORMATION	25

# ARCHITECTURAL IN FY2013, ARCHITECTURAL REVENUES WERE ¥215,739 MILLION (¥239,440 MILLION IN FY2012). OPERATING PROFIT\* WAS ¥303 MILLION (¥9,135 MILLION IN FY2012).

Buildings account for almost 50 percent of the energy consumed in developed countries. Increased focus is being placed on legislation and policies to improve their energy efficiency.

Our products play a vital role in improving energy efficiency and reducing CO<sub>2</sub> emissions. They also offer other advanced functionality, protecting against fire, insulating against noise, offering safety and security, privacy, decoration and even self-cleaning properties.

Glass has an important role to play in the development of the Solar Energy sector. We supply products for all three of the leading technologies, converting power from the sun into clean renewable energy.

#### **Revenue by region** Financial Year 2013



42%

#### Contribution to Group revenue

\* Before exceptional items

#### **Global review**

#### Summary

Architectural results continued to improve, but with relatively weak profitability. Volumes were significantly below last year, although the rate of decline slowed during the year. Profitability improved, with the impact of restructuring actions beginning to more than offset deteriorating market conditions. As anticipated, Solar Energy dispatches were significantly below the previous year.

#### Europe

Revenues and profits fell from the previous year, but with losses narrowing, as restructuring actions significantly reduced the Group's cost base. During the fourth quarter, prices were stable, although at a low level.

#### Japan

Revenues were below the previous year, with improving domestic markets being more than offset by reduced dispatches of Solar Energy glass. Adverse weather conditions impacted demand during the fourth quarter, although underlying sentiment in the construction sector continued to improve.

#### North America

Revenues and profits were below the previous year. Dispatches of Solar Energy products fell, more than offsetting improving domestic construction markets.

#### **Rest of the World**

In the Rest of the World, revenues improved from the previous year with a full period of sales generated by the Group's Solar Energy float line in Vietnam, which started production during the previous year. Volumes in South America were similar to the previous year. Market conditions in South East Asia improved during the fourth quarter. Our Solar Energy rolled line in China experienced weak demand throughout the year.

#### Outlook

In FY2014, we expect activity in European markets to continue to be at a low level, but without further significant volume decline. European Architectural prices are not expected to fall further and pricing should be aided by industry-wide capacity reductions, leading to an improved level of utilization.

In Japan, markets are expected to benefit from improving business sentiment, resulting from a weakening currency and government growth initiatives.

Volumes in North America should continue the improvement experienced in FY2013. Volume growth is also expected in our emerging markets. Solar Energy dispatches are expected to be stable.

#### NSG Spacia®

#### Medium thermal insulation in only 6mm

NSG Spacia® is the world's first commercially available vacuum glazing. It offers the thermal performance of conventional double glazing in the same thickness as single glass (6mm).

NSG Spacia<sup>®</sup> provides a real solution to the problems of balancing historical preservation with modern comfort and environmental requirements.

NSG's Spacia® product fitted in historic Archibald Place, Edinburgh, Scotland.





The 2012 extension to the Seinäjoki library in Finland features Pilkington Planar™ Triple glazing.

#### Pilkington Planar™ Triple Enhanced thermal insulation

Triple glazed insulating units can be incorporated into the Pilkington Planar<sup>™</sup> system to give enhanced thermal insulation.

The Pilkington Planar™ structural glazing system provides a flush glass surface by utilizing stainless steel fittings housed in countersunk holes to fix the glass façade back to the structure.



DVERVIEW	01
DUR BUSINESS CONTINUED	
FINANCIAL PERFORMANCE	20
CORPORATE INFORMATION	25

# AUTOMOTIVE IN FY2013, AUTOMOTIVE REVENUES WERE ¥245,022 MILLION (¥251,229 MILLION IN FY2012). OPERATING PROFIT\* WAS ¥4,755 MILLION (¥5,123 MILLION IN FY2012).

One of only three glass groups in the world with global automotive glazing capability and presence, the NSG Group supplies all of the world's major automotive and specialized transport vehicle manufacturers under the Pilkington Automotive brand.

We provide a full range of glazing solutions on a global basis to our customers, drawing heavily on our advanced technology, continuous improvement and standardization activities.

Combined geographical presence now makes the NSG Group the largest global operator in automotive replacement glass distribution and wholesale.

#### **Revenue by region** Financial Year 2013



#### Contribution to Group revenue

\* Before exceptional items

#### **Global review**

#### Summary

Automotive revenues fell from the previous year, due largely to a significant decline in volumes in Europe, where light vehicle demand fell to its lowest level for 15 years. This was partly offset by relatively strong demand in Japan, and also in North America.

#### Europe

In the European Original Equipment (OE) sector, revenues and profits fell from the previous year, due to reduced demand. Results in the Automotive Glass Replacement (AGR) business were similar to the previous year, with reduced demand offset by an increasing proportion of sales of higher value-added products. In October 2012, the Group announced its intention to close its Automotive manufacturing facilities in Landskrona, Sweden, and Ylöjärvi, Finland. These closures will be completed during FY2014.

#### Japan

Cumulative OE revenues and profits in Japan were higher than the previous year. Following the March 2011 earthquake, which significantly affected the start of the previous year, market volumes have improved steadily. During the third and fourth quarters, volumes were stable but below the level of the previous year. AGR revenues and profits were similar to the previous year.

#### North America

OE revenues improved from the previous year, due to increased volumes, but profitability remains weak. AGR revenues and profits fell, with reduced market demand.

#### Rest of the World

In the Rest of the World, local currency revenues were generally similar to the previous year. Profitability improved slightly, but is still at a low level.

#### Outlook

The Group expects that in FY2014, activity in European Automotive markets will continue to be at a low level. In Japan, volumes are expected to be negatively impacted by an end to vehicle purchase subsidies and further transfers of vehicle production to other locations. Sales in North America should continue to improve, as should sales to customers in emerging markets.

Profitability will be aided by the restructuring actions initiated in FY2013, as well as by the increases in capacity and capability recently implemented within the Group's lowest-cost and most efficient plants.

#### **Original Equipment (OE)**

Most of our OE production is focused on the volume light vehicle industry, serving all of the world's major vehicle manufacturers, including Toyota, GM, Ford, VW, Renault/Nissan, Chrysler, Mercedes, Fiat, Honda, PSA, BMW, Mitsubishi, Subaru and Suzuki, together with their respective subsidiary brands.

Of all such vehicles built in the world last year, around one in three contained glazing manufactured by the NSG Group.

High-volume regional vehicles we are supplying include the Mazda Axela in Japan.



AXEL

Photo © Mazda Motor Corporation. All rights reserved. Further copying or distribution strictly prohibited.

NSG glazing fitted in the '1000 Series' rolling stock, launched on the Ginza line of the Tokyo Metro in 2012. Photo @ Tokyo Metro

#### **Specialized Transport**

We provide high-quality glazing solutions and value-added products to the original equipment manufacturers of specialized transport and utility vehicles. Our customers are recognized as world-leading manufacturers, with many operating on a global basis.

#### Automotive Glass Replacement (AGR)

We have well-developed aftermarket distribution and wholesale networks throughout Europe and North America.

We are also well established in serving the aftermarkets in Japan, South America and South East Asia.

The Group's AGR distribution center in Columbus, Ohio, USA carries over 9,000 different automotive glass parts and 3,000 unique trim and accessory parts.



**Our business** 

OVERVIEW	01
OUR BUSINESS CONTINUED	
FINANCIAL PERFORMANCE	20
CORPORATE INFORMATION	25

TECHNICAL GLASS IN FY2013, TECHNICAL GLASS REVENUES WERE ¥59,404 MILLION (¥60,167 MILLION IN FY2012). OPERATING PROFIT\* WAS ¥6,719 MILLION (¥6,942 MILLION IN FY2012).

Our Technical Glass business operates in a number of discrete sectors, including the manufacture and sale of very thin glass for small displays, lenses and light guides for printers, as well as glass fiber products, such as battery separators and glass components for engine timing belts.

The NSG Group is a pioneer in the field of micro-optics, researching, developing and manufacturing a variety of optoelectronic products. Glass fiber has become a high-profile, high-tech material in a variety of fields: it is light and strong, heat-resistant, non-conductive and resistant to chemicals.

#### **Global review**

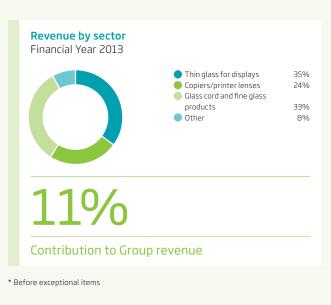
#### Summary

Revenues and profits in the Technical Glass business were similar to the previous year. Demand for thin glass for displays remains stable, with end-customer demand in sectors such as smart phones and tablet devices generally positive.

Demand for components used in multi-function printers were similar to the previous year, but softened in the final quarter. Demand for glass cord used in engine timing belts fell in Europe, consistent with market conditions experienced in the Automotive business.

#### Outlook

Technical Glass markets are likely to be broadly in line with FY2013 levels. Demand for thin glass for displays is expected to grow as consumers increasingly switch from personal computers to tablet devices. Components used in multi-function printers and demand for glass cord is expected to remain at the current low levels.



#### Display panels in communications devices

# Helping to cut power consumption and reduce need for peripherals

We are a world-leading supplier of ultra-thin glass for smart phones and tablet devices, helping to reduce power consumption in the display market. Our Ultra Fine Flat Glass (UFF®) is produced in thicknesses as low as 0.3mm to 1.1mm. These products are increasingly being used in the growing touch-panel market, particularly in mobile devices and tablet devices. This technology helps reduce the need for additional peripheral equipment, such as keyboards and printers.



The Group's ultra-thin glass is used in displays in a wide range of smart phones and tablet devices.

#### NSG Microglas® Glass Flake in high-performance coatings 20-year protection for the world's tallest man-made structure

The soaring spire of the Burj Khalifa in Dubai is protected by a glass flake reinforced polyester coating supplied by one of our glass flake customers.

The flakes within the paint prevent moisture from penetrating to the structure beneath, and the coating promises to protect the spire from abrasion, water and most chemicals for a minimum of 20 years, while requiring minimal maintenance.

NSG Microglas® Glass Flake is used in high-performance long-life paints.



#### NSG Selfoc<sup>®</sup> Lens Array technology Facilitating a new generation of color LED printers

LED printers, which use a Light Emitting Diode array as the light source in the print head, instead of a conventional laser, are becoming increasingly popular. They are invariably smaller, lighter and use less energy.

There is also less mechanical wear, as the LED print head has no moving parts.

The new Ricoh IPSiO SP C730 features NSG Selfoc® Lens Array technology.

DVERVIEW	01
DUR BUSINESS	10
FINANCIAL PERFORMANCE	
CORPORATE INFORMATION	25

# CHIEF FINANCIAL OFFICER'S REVIEW THE FULL YEAR RESULTS REFLECT THE LOW LEVELS OF ACTIVITY EXPERIENCED IN THE GROUP'S MAJOR MARKETS, ALTHOUGH SIGNS OF IMPROVEMENT HAVE BEEN SEEN IN SOME AREAS.

"The Group's businesses continued to face challenging market conditions during the year, experiencing low levels of activity, particularly in Europe, which forms a significant proportion of the Group's revenues.

The Group's focus on cash generation has led to a significant improvement in cash flow performance, despite the challenging trading environment.

The acceleration of the Group's restructuring activities and profit improvement program produced cost savings of ¥10,000 million in FY2013 – approximately double the benefit previously estimated."



Mark Lyons Chief Financial Officer

#### **Results for the year**

The Group's businesses continued to face challenging market conditions during the year, with low levels of activity, particularly in Europe, which forms a significant proportion of the Group's revenues.

Against this background, the Group has accelerated its restructuring activities and profit improvement program. This program has produced cost savings of  $\pm$ 10,000 million in FY2013, being approximately double the benefit previously estimated.

The results for the year are presented using International Financial Reporting Standards (IFRS), which the Group has adopted from the beginning of FY2012.

#### Revenue

Revenue decreased by 6 percent from ¥552,223 million to ¥521,346 million. The reduction was due to the challenging market conditions experienced in the Group's major markets.

#### Trading profit

Trading profit (before amortization and exceptional items) fell from a profit of ¥14,904 million to a profit of ¥8,986 million. After charging amortization costs arising on the acquisition of Pilkington plc, operating profit before exceptional items fell from a profit of ¥7,716 million to a profit of ¥1,946 million. After charging exceptional items, operating profits fell from a profit of ¥4,386 million to a loss of ¥17,258 million.

	Millions of yen	
	2013	2012
Revenue	521,346	552,223
Trading profit	8,986	14,904
Amortization arising on acquisition of Pilkington plc	(7,040)	(7,188)
Operating profit before exceptional items	1,946	7,716
Exceptional items	(19,204)	(3,330)
Operating (loss)/profit	(17,258)	4,386
Finance costs (net)	(14,060)	(14,323)
Share of profit of joint ventures and associates	2,250	5,115
Loss before taxation	(29,068)	(4,822)
Taxation	(2,871)	3,073
Loss for the period	(31,939)	(1,749)
Profit attributable to non-controlling interest	s <b>869</b>	1,066
Loss attributable to owners of the parent	(32,808)	(2,815)
Net loss per share – basic (yen)	(36.36)	(3.12)
Net loss per share – diluted (yen)	(36.36)	(3.12)

#### Operating profit – Architectural

Architectural volumes were significantly below the levels of FY2012, but were relatively stable at low levels by the end of the year. Solar Energy dispatches, as anticipated, were significantly below the previous year.

In the Architectural business line, Europe represents 38 percent of sales, Japan 33 percent, and North America 9 percent. The rest arises in other areas of the world including South America, South East Asia, and China.

In Europe, revenues and profits fell from the previous year. Losses narrowed during the year, however, as restructuring actions significantly reduced the Group's European cost base. Excluding Solar Energy dispatches, cumulative Architectural volumes fell by approximately 12.5 percent from the previous year, leading to industry-wide over-capacity and a weak pricing environment.

In Japan, revenues were below the previous year, with improving domestic markets being more than offset by reduced dispatches of Solar Energy glass. Underlying conditions in construction markets continued to improve gradually, with new housing starts being approximately 5 percent higher than the previous year.

In North America, revenues and profits were below the previous year. Dispatches of Solar Energy products fell, more than offsetting improving domestic construction markets.

In the Rest of the World, the Group's Architectural markets in South America continued to grow, albeit relatively slowly. Architectural markets in South East Asia improved during the fourth quarter, while the Group's Solar Energy rolled line in China experienced weak demand throughout the year.

The Architectural business achieved sales of ¥215,739 million (FY2012: ¥239,440 million) and an operating profit before exceptional items of ¥303 million (FY2012: ¥9,135 million).

#### Operating profit – Automotive

In the Automotive business, revenues fell from the previous year, due largely to a significant decline in European volumes. This was partly offset by relatively strong demand in Japan, where the previous year had been affected by the March 2011 earthquake, and also in North America.

In the Automotive business line, Europe represents 43 percent of sales, Japan 19 percent, and North America 23 percent. The rest arises in other areas of the world including South America, South East Asia, and China.

In the European Original Equipment (OE) sector, revenues and profits fell from the previous year, as light vehicle demand fell to its lowest level for more than 15 years. Results in the Automotive Glass Replacement (AGR) business were similar to the previous year, with reduced demand being offset by an increasing proportion of sales of higher value-added products.

In Japan, cumulative OE revenues and profits were higher than the previous year. Following the March 2011 earthquake, which significantly affected the start of the previous year, market volumes have improved steadily. AGR revenues and profits were similar to the previous year.

In North America, OE revenues improved from the previous year, due to increased volumes. However, profitability remains weak. AGR revenues and profits fell, with reduced market demand. In the Rest of the World, local currency revenues were generally similar to the previous year. Profitability improved slightly, but is still at a low level.

The Automotive business recorded sales of ¥245,022 million (FY2012 ¥251,229 million) and an operating profit before exceptional items of ¥4,755 million (FY2012 ¥5,123 million).

#### **Operating profit – Technical Glass**

Profits in Technical Glass fell slightly from the previous year. The Group experienced stable demand in sectors such as smart phones and tablet devices, where the Group's UFF® (Ultra Fine Flat) glass is used within the construction of touch panels. Volumes of components used in multi-function printers were similar to the previous year, but softened in the final quarter as exporters of multi-function printers and similar products continue to suffer from a decline in consumer demand. Sales of glass cord for engine timing belts fell in Europe, consistent with the conditions experienced in the European automotive business.

The Technical Glass business recorded sales of ¥59,404 million (FY2012: ¥60,167 million) and an operating profit before exceptional items of ¥6,719 million (FY2012: ¥6,942 million).

#### Exceptional items

The Group has separately disclosed exceptional items in its income statement. These costs are analyzed in a note to the Annual Financial Statements and comprise transactions that are of a material, non-routine nature. The Group has also included the costs of its restructuring program in this category.

#### Joint ventures and associates

The Group's share of joint ventures and associates profits decreased from ¥5,115 million to ¥2,250 million. Profits at Cebrace, the Group's joint venture in Brazil, fell, as did profits in the Group's joint ventures and associates in China. Profits at the Group's Architectural joint venture in Russia were similar to the previous year.

#### Interest expenses

Net interest expenses were similar to the previous year.

#### **Taxation**

The Group has a tax charge for the financial year to 31 March 2013 equivalent to 9.17 percent of the loss before taxation for the period, after excluding the Group's share of net profits of joint ventures and associates (FY2012: a tax credit of 30.93 percent on a loss for the period). The tax charge for the year is calculated as the sum of the total current and deferred tax charge or credit arising in each territory in which the Group operates and applying the prevailing statutory tax rate and tax law in that territory. The tax charge consists of a current taxation charge of ¥3,810 million and a deferred taxation credit of ¥939 million.

#### Non-controlling interests

Profits attributable to non-controlling interests decreased from ¥1,066 million to ¥869 million. This was due to a reduction in profitability of the Group's operations with non-controlling interests, which operate mainly in the Architectural business unit.

OVERVIEW	01	
OUR BUSINESS	10	
FINANCIAL PERFORMANCE CONTINUED		
CORPORATE INFORMATION	25	

# CHIEF FINANCIAL OFFICER'S REVIEW

#### Earnings per share

Basic (undiluted) earnings per share decreased from a net loss per share of  $\pm 3.12$  to a net loss per share of  $\pm 36.36$ .

#### Dividends

The Group's dividend policy is to secure dividend payments based on sustainable business results. As a consequence of the current market conditions faced by the Group, and the loss recorded for the year, the directors do not recommend a dividend for the year to 31 March 2013. The Group recognizes the importance of dividends to its shareholders and anticipates resuming dividend payments when the financial performance of the Group allows.

#### Cash flows

	Millions of yen	
	2013	2012
Operating cash flows before		
financial items	32,796	8,436
Interest received less interest paid	(12,572)	(12,815)
Income taxes paid	(6,011)	(5,535)
Net cash generated from/(used in)		
operating activities	14,213	(9,914)
Capital expenditure (net of disposals)	(24,420)	(26,641)
Acquisitions less divestments	10,349	(3,468)
Other investing cash flows	7,030	3,782
Net cash flows before dividends		
and financing	7,172	(36,241)

The Group's focus on cash generation has led to a significant improvement in cash flow performance, despite the challenging trading environment.

Operating cash flows before financial items increased from \$8,436 million to \$32,796 million, due mainly to the decrease in working capital levels during the year. Interest and taxation payments were similar to the previous year. As a result, net cash generated by operating activities improved from an outflow of \$9,914 million to an inflow of \$14,213 million.

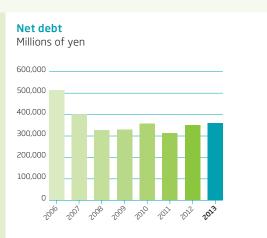
Capital expenditure, net of disposals, decreased from ¥26,641 million to ¥24,420 million. The Group will continue to manage capital expenditure at below the level of depreciation during FY2014.

#### **Funding and liquidity**

#### Net debt

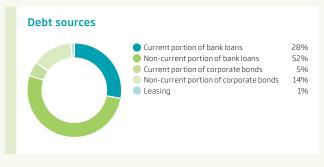
Net financial indebtedness increased by ¥9,693 million from 31 March 2012 to ¥360,848 million at the period end. Increases in indebtedness were caused primarily by the low overall level of profitability, and expenditure on the Group's restructuring program. Currency movements generated an increase in net debt of approximately ¥8,840 million over the period. Gross debt was ¥447,849 million at the period end.

The chart below shows the level of net debt at each period end following the acquisition of Pilkington plc in June 2006.



#### Sources of finance

The Group is financed by a combination of cash flows from operations, bank loans and corporate bonds. The chart below analyzes the Group's sources of debt at 31 March 2013.



The Group aims to refinance borrowings well before their due date and ensures that any uncommitted or short-term borrowings are supported by undrawn committed facilities. The Group aims to obtain its funding from a variety of sources and access markets globally as and when they are available to it. The Group seeks to deal with relationship banks that are able to support its businesses worldwide with the services it requires and at the same time provide, where necessary, appropriate levels of credit. The chart below shows the maturity of the Group's committed facilities as at 31 March 2013.



As at 31 March 2013 the Group had undrawn committed facilities of ¥33,800 million, with various maturities. The above table does not include the ¥70,000 million facility announced on 28 March 2013, as this facility was not available to be drawn at the balance sheet date.

The Group has obtained long-term investment grade credit ratings from two rating agencies. The current ratings are BBB from JCR and BB+ from R&I.

#### Shareholders' equity (net assets)

Total equity at the end of March 2013 was ¥155,453 million, representing a decrease of ¥15,082 million from the end of March 2012. This was mainly due to the loss recorded in the period.

#### **Treasury management**

The Group has a global treasury function appropriate for the global nature of our business. The treasury function is responsible for the provision of the Group's liquidity management and for the management of the Group's interest, commodity and foreign exchange risks, operating within policies and authority limits set by the Board of Directors. The Board approves a set of financial counterparties noted for their strong credit standing. Treasury operations are reviewed annually by the Group Internal Audit Function, to ensure compliance with the Group's policies.

#### Risk management – foreign exchange and interest rates

The Group has major manufacturing operations in 30 countries and sales in around 130 countries. Assets are hedged where appropriate by matching the currency of borrowings to the net assets.

The Group borrows in a variety of currencies, principally, but not limited to, Japanese yen, euro, US dollars and sterling, at both fixed and floating rates of interest, using derivatives where appropriate to generate the desired effective currency and interest rate exposure. The financial instruments used for this purpose are principally interest rate swaps and forward foreign exchange contracts. Material foreign exchange transactions are hedged when reasonably certain, usually through the use of foreign exchange forward contracts. The Group does not engage in speculative trading of financial instruments or derivatives. However, risks arise in these transactions if the expected cash flow does not arise or if the highly rated financial counterparty does not perform its obligations under the contract. The policies require immediate cancellation of any derivative that is found to be no longer required.

Exposure to interest rate fluctuations on borrowings is managed by borrowing on either a fixed or floating basis and entering into interest rate swaps or forward rate agreements. The policy objective is to have a target proportion, currently 30 percent to 70 percent of forecast net borrowings, hedged at all times for a period of greater than one year. Foreign exchange contracts and interest rate swaps are transacted in such a way as to ensure deferral hedge accounting on some transactions.

#### Risk management – commodities

The Group consumes significant amounts of energy and is exposed to energy price risk arising from this consumption, principally of oil and gas. The Group's risk management policy for energy is to hedge between 20 percent and 100 percent of anticipated purchases for the subsequent 12 months and between 10 percent and 80 percent for the next four years.

The financial instruments used for this purpose are energy swaps and are trades with highly rated financial counterparties. Risks arise in these transactions if the expected cash flow does not arise or if the highly rated financial counterparty does not perform its obligations under the contract. The policies require immediate cancellation of any derivative that is found to be no longer required.

Commodity hedging is transacted in order to ensure effectiveness of the hedge, therefore the Group usually benefits from deferral hedge accounting on all transactions.

#### Fair values of financial instruments

Financial instruments are shown on the balance sheet at the fair value on the balance sheet date. Fair values of derivatives are calculated with reference to forward exchange rates, interest rates or commodity prices in the financial markets on the balance sheet date. Expected future cash flows on these contracts are discounted to the balance sheet date. Where an instrument is tradable in the financial markets we use this market price as the fair value. Fair values are expected to change throughout the life of the instrument, such that this valuation is only relevant at the balance sheet date and may not equate to an actual price at which the instrument can be sold.

#### Cash and deposits

The Group invests cash balances and short-term money market balances with a selected group of credit-worthy financial institutions. Cash and deposits are short term and are used for the day-to-day operation of the business. Interest accrues on cash balances at market interest rates, therefore the fair value of our cash and deposits equates to the balance sheet value.

#### Corporate governance and risk management

The Group has an established system of internal controls. These controls have been thoroughly documented and tested during the year, as part of the Group's ongoing J-SOX compliance program.

Mark Lyons Chief Financial Officer

OVERVIEW	01	
OUR BUSINESS	10	
FINANCIAL PERFORMANCE CONTINUED		
CORPORATE INFORMATION	25	

# CONSOLIDATED FINANCIAL HIGHLIGHTS

		Millions of yen
	2013	2012
Revenue	521,346	552,223
Trading profit*	8,986	14,904
Loss before taxation	(29,068)	(4,822)
Loss for the period	(31,939)	(1,749)
Loss attributable to owners of the parent	(32,808)	(2,815)
Earnings per share attributable to owners of the parent		
Basic	(36.36)	(3.12)
Diluted	(36.36)	(3.12)
Cash dividends	-	4.50
Total assets	885,436	848,752
Total shareholders' equity	145,031	161,313
Number of permanent employees	27,932	29,702



\* Operating profit before exceptional items and the amortization of intangible assets arising on the acquisition of Pilkington plc.

# **BOARD OF DIRECTORS**



**Seiichi Asaka** External Director Chairman of the Board



Clemens Miller Director Representative Executive Officer Executive Vice President Chief Operating Officer



Keiji Yoshikawa Director Representative Executive Officer President and CEO



Mark Lyons Director Representative Executive Officer Executive Vice President Chief Financial Officer



Kenichi Morooka Director Executive Officer Executive Vice President



George Olcott External Director



Sumitaka Fujita External Director



Hiroshi Komiya External Director

#### Nomination Committee George Olcott\*

George Olcott\* Sumitaka Fujita Seiichi Asaka Hiroshi Komiya Keiji Yoshikawa

#### Audit Committee

Sumitaka Fujita\* George Olcott Seiichi Asaka Hiroshi Komiya

#### **Compensation Committee** Hiroshi Komiya\*

Hiroshi Komiya\* George Olcott Sumitaka Fujita Seiichi Asaka Keiji Yoshikawa

\* Committee Chairman

OVERVIEW	01
OUR BUSINESS	10
FINANCIAL PERFORMANCE	20
CORPORATE INFORMATION	

### **CORPORATE DATA**

#### 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 Telephone: +81-3-5443-9500

#### Established

22 November 1918

# Number of permanent employees (consolidated) 27,932

**Number of shares** Authorized: 1,775,000,000 Issued: 903,550,999

Number of shareholders 86,959

**Paid-in capital** ¥116,449 million

**Stock listing** Tokyo (Code: 5202)

Independent auditors Ernst & Young ShinNihon LLC

#### Transfer agent

Sumitomo Mitsui Trust Bank, Limited 4-1, Marunouchi 1-chome, Chiyoda-ku, Tokyo, Japan

# SHAREHOLDER INFORMATION

#### Major shareholders as at 31 March 2013

	Number of shares	Percentage of shares
Japan Trustee Services Bank, Ltd. (Trust Account)	27,479,000	3.04
The Master Trust Bank of Japan, Ltd. (Trust Account)	25,839,000	2.85
The Nomura Trust and Banking Co., Ltd. (Investment Trust Account)	14,129,000	1.56
Credit Suisse Securities (Europe) Limited PB Omnibus Client Account	12,839,000	1.42
Chase Manhattan Bank GTS Clients	12,377,776	1.36
Account Escrow State Street Client Omnibus Account OM44	12,347,300	1.36
Raiffeisen Bank International AG Client A/C	12,175,000	1.34
Toyota Motor Corporation	9,610,650	1.06
Sumitomo Life Insurance Company	9,148,000	1.01
Japan Trustee Services Bank, Ltd. (Retirement Benefit Trust Account of Sumitomo Mitsui Trust Bank)	8,769,000	0.97

#### Status of shareholders as at 31 March 2013

	Number shareholders	Number of of shares (thousands)	Percentage of shares
Common shares			
Financial institutions	51	179,733	19.9
Securities companies	80	31,945	3.5
Other corporate entities	862	45,613	5.1
Foreign companies/individuals	322	199,729	22.1
Other individual investors	85,643	445,567	49.3
Treasury stock	1	964	0.1
Total	86,959	903,551	100.00

#### 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 100-8233, Japan

#### Operating office of the transfer agent

Stock Transfer Agency Department, Sumitomo Mitsui Trust Bank, Limited 4-1 Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8233, Japan

#### Public notice

www.nsg.com

#### Independent auditors

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 999 shares) which is less than a trading unit of shares (1,000 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 only)

OVERVIEW	01	
OUR BUSINESS	10	
FINANCIAL PERFORMANCE	20	
CORPORATE INFORMATION CONTINUED		

# FURTHER INFORMATION

We produce a regular flow of publications intended to provide current and potential investors with as much information as possible about the Group, the industries in which we operate and the organization, strategy, targets and progress of the Group. Some of our key publications are shown below.

#### **Publications**



#### Annual Financial Statements

Published annually, in June, in parallel with the Annual Report, containing supplementary information on the Group's financial performance.



#### To Our Shareholders

Published twice a year, in June and December, designed to keep shareholders informed of progress against our strategy, Editions in both English and Japanese.



#### **Sustainability Report**

Published annually in February, reporting on the Group's progress in advancing its sustainability agenda in the previous calendar year. Published in English.



#### The Way we do Business

Produced for employees in all of the languages in which the Group operates, summarizing the main points of the Group's Code of Conduct.

#### Websites



# NSG Group Corporate website (English) www.nsg.com

NSG Group Corporate website (Japanese) www.nsg.co.jp

Commercial website (Architectural and Automotive) www.pilkington.com

Published by NSG Group Corporate Communications Department Designed by Corporate Edge

