NSG

GROUP

# NSG Group

## FY2019 Second Quarter Results

**(from 1 April 2018 to 30 September 2018)**

Nippon Sheet Glass Company, Limited
1 November 2018

**Shigeki Mori**
Chief Executive Officer

**Clemens Miller**
Chief Operating Officer

**Kenichi Morooka**
Chief Financial Officer

# Agenda

NSG GROUP

1. FY2019 Second Quarter Financial Results
2. FY2019 Second Quarter Business Update
3. Redemption of Class A Shares
4. Centennial Commemoration Dividend
5. Medium-term Plan (MTP) Phase 2 Update
6. Summary

## FY2019 2nd Quarter Results Highlights

NSG GROUP

| | | |
|---|---|---|
| Revenue | JPY **308.1** bn (+5%) | Benefitted from VA sales increase and robust markets |
| Trading profit | JPY **18.8** bn (+1%) | Improved profitability in Automotive Europe and Technical Glass offset cost increases |
| Exceptional items | JPY **(1.2)** bn | Reversal of impairment related to the re-start of mothballed float line and restructuring costs in Europe |
| Share of JVs and associates | JPY **3.8** bn | Gain recognized by Cebrace, in relation to the sales tax overpaid in previous years |
| Profit attributable to owners of the parent | JPY **9.3** bn (+94%) | Significant year-on-year improvement from reduction in net finance costs and recognition of one-off credit |
| Free cash flow | JPY **(9.2)** bn | Seasonality of working capital movements |

Operating results in line with forecast, significant year-on-year improvement in net profit

1 November 2018 | FY2019 2nd Quarter Results 5

Slide 5 sets out the Highlights of the FY2019 Second Quarter Results.

Revenue increased by 5% from the previous year to 308.1 billion yen, due to an increase in VA sales and generally improving markets, especially in Europe. At constant exchange rates, the increase was 7%.

Trading profit was in line with our forecast at 18.8 billion yen. Improved profitability in Automotive Europe and Technical Glass more than offset increases in input costs..

Exceptional items represented a net cost of 1.2 billion yen, which includes restructuring costs in Europe to further improve the cost base, in addition to a credit of 2.7 billion yen due to the reversal of impairment related to the mothballed float line which was recognized in the first quarter.

The share of JVs and associates’ profits is 3.8 billion yen. This includes a gain in relation to sales tax overpaid in previous years as recognized by the Group’s joint venture in Brazil, as announced today.

Profit attributable to owners of the parent improved by 94% to 9.3 billion yen, due to reduction in finance costs and the one-off credit in the Share of JVs and associates, in addition to the solid operating performance.

Affected by the seasonality of working capital movements, free cash outflow was 9.2 billion yen. As seen in the previous years, we are expecting this to improve with a cash generating trend towards the end of this fiscal year.

## Consolidated Income Statement

NSG GROUP

| (JPY bn) | FY2018 2nd Quarter *1 | FY2019 2nd Quarter | FY2019 Full year forecast |
|---|---|---|---|
| **Revenue** | **294.0** | **308.1** | **630.0** |
| **Trading profit** | **18.6** | **18.8** | **43.0** |
| Amortization *2 | (1.0) | (1.0) | (2.0) |
| **Operating profit** | **17.6** | **17.8** | **41.0** |
| Exceptional items | (1.8) | (1.2) | (7.0) |
| Finance expenses (net) | (7.6) | (6.7) | (13.0) |
| Share of JVs and associates | 1.0 | 3.8 | 3.0 |
| **Profit before taxation** | **9.2** | **13.7** | **24.0** |
| **Profit for the period** | **5.5** | **10.0** | **16.0** |
| **Profit attributable to owners of the parent** | **4.8** | **9.3** | **14.0** |
| EBITDA | 31.5 | 32.0 | |

*1: Restated due to adoption of IFRS15 "Revenue from contracts with customers"

*2: Amortization arising from the acquisition of Pilkington plc only

On track to achieve annual forecast

1 November 2018 | FY2019 2nd Quarter Results 6

The Group's Consolidated Income Statement is presented on Slide 6.

There are three columns in this chart. From the left, the first column shows the results of the second quarter last year and the second column shows the cumulative results of this quarter. The third column shows the Group's annual forecast.

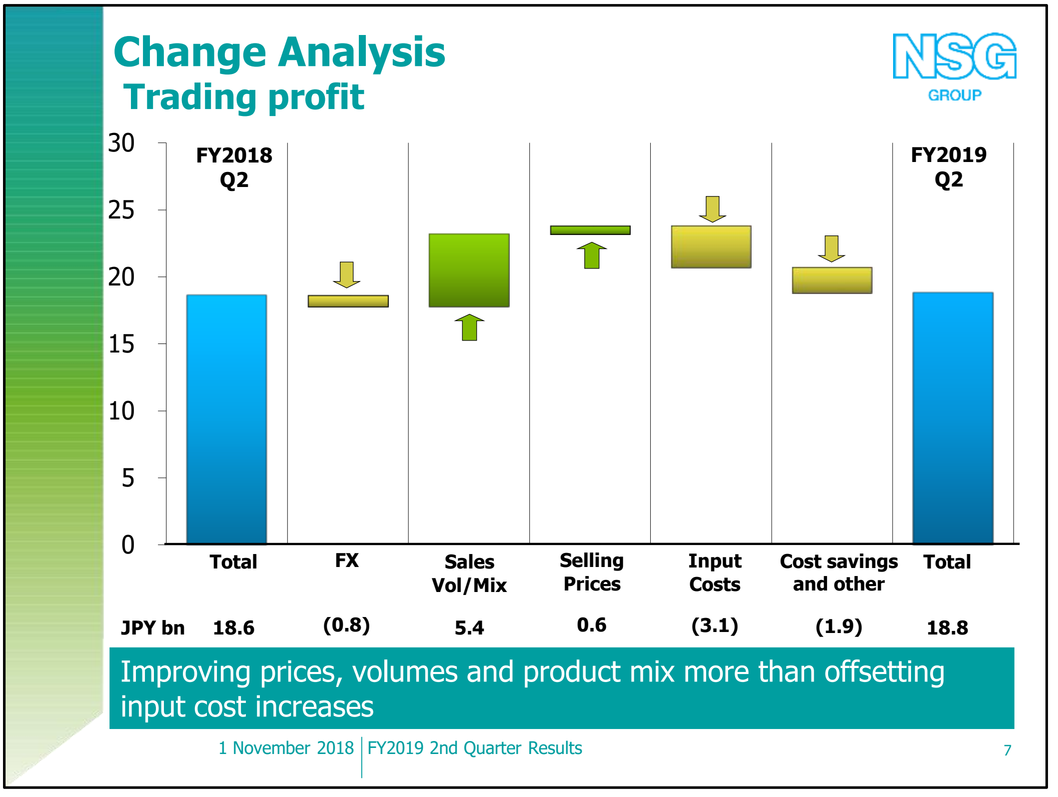
As discussed in the first quarter, the Group adopted IFRS15 "Revenue from Contracts with Customers" from this fiscal year, which requires the Group to restate the last year's comparative numbers. The impact of adopting this standard is immaterial.

In addition, from this quarter, we have adopted hyperinflation accounting for our subsidiaries in Argentina, and I will explain the impact of that shortly.

Revenue, trading profit and exceptional items are all as explained on the previous slide.

Profit attributable to owners of the parent improved from the previous year to 9.3 billion yen, with reduced finance costs and an improvement in the share of profits from joint ventures and associates.

As the operating performance is in line with our expectations, the Group will maintain its annual forecast which was announced in May.




Slide 7 lays out the analysis of year-on-year trading profit movement.

From this quarter, we are presenting the impact of foreign exchange movements separately. Affected by the decrease in value of Argentine peso, FX impact is negative at 0.8 billion yen.

Increases in volumes and improvements in product mix were seen in Architectural Europe and Asia, Automotive Europe and Technical Glass.

Prices have generally remained stable across most of our businesses.

As seen in the first quarter, the Group has experienced an increase in energy costs. Logistics and raw materials costs also increased from the previous year.

The cost savings and other column is negative, due to the effect of a float repair in Germany and last year’s one-off gains which did not recur in this fiscal year.

This chart shows therefore, that the underlying improvement in profitability is rather stronger than the headline numbers would suggest.

# Key Performance Indicators

| | 30-Sep-17 *1 | 30-Sep-18 | 31-Mar-18 *1 |
|---|---|---|---|
| Net Debt (JPY bn) | 329.6 | 320.1 | 306.5 |
| Net Debt/EBITDA | 5.2x | 5.0x | 4.8x |
| Net Debt/Equity Ratio | 2.2x | 2.2x | 2.1x |
| Shareholders' Equity Ratio | 18.2% | 17.8% | 17.1% |
| | **FY2018 *1 2nd Quarter** | **FY2019 2nd Quarter** | **FY2018 *1 Full-year** |
| Operating Return *2 on Sales | 6.3% | 6.1% | 6.3% |

*1: Restated due to adoption of IFRS15 "Revenue from contracts with customers"

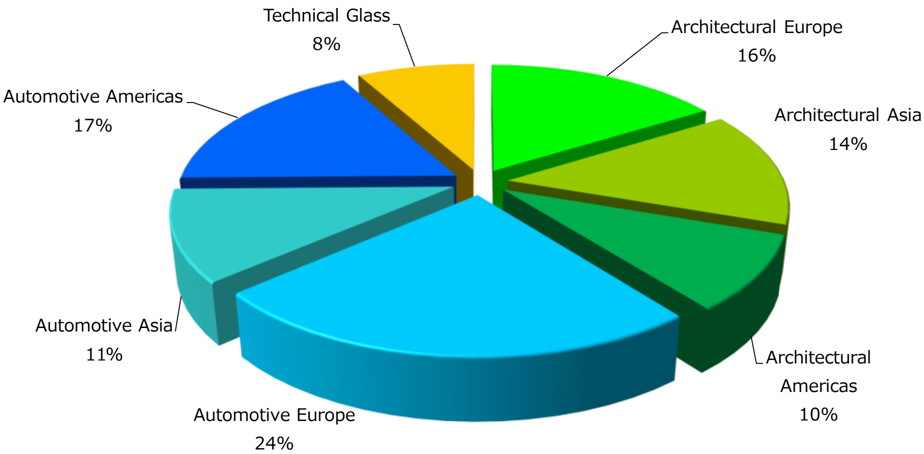
*2: Trading profit

**Year-on-year improvement in Net Debt and Net Debt / EBITDA ratio**

## External Revenue - Group Businesses

NSG GROUP

¥ 308.1 billion



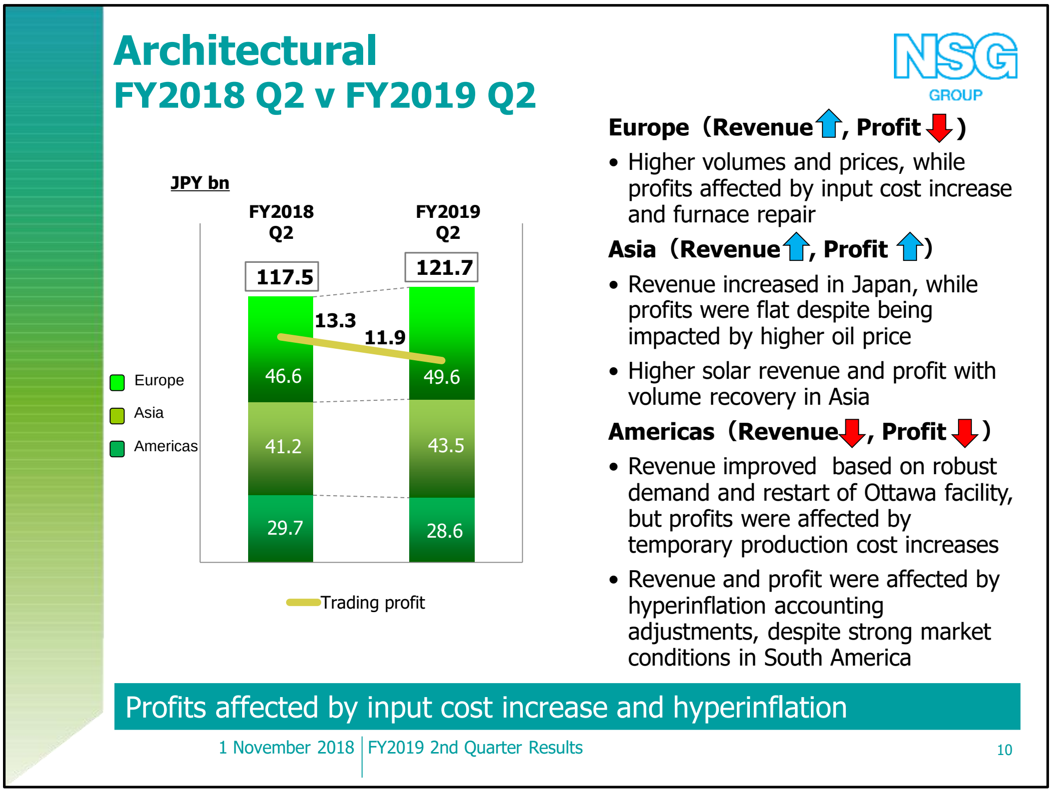

**FY2019 2nd Quarter**

Diversified geographical coverage



Slide 9 shows the proportion of sales generated by each of the Group's business segments.

41 percent of the Group's sales are in Europe, 32 percent in Asia including Japan and 27 percent in Americas.



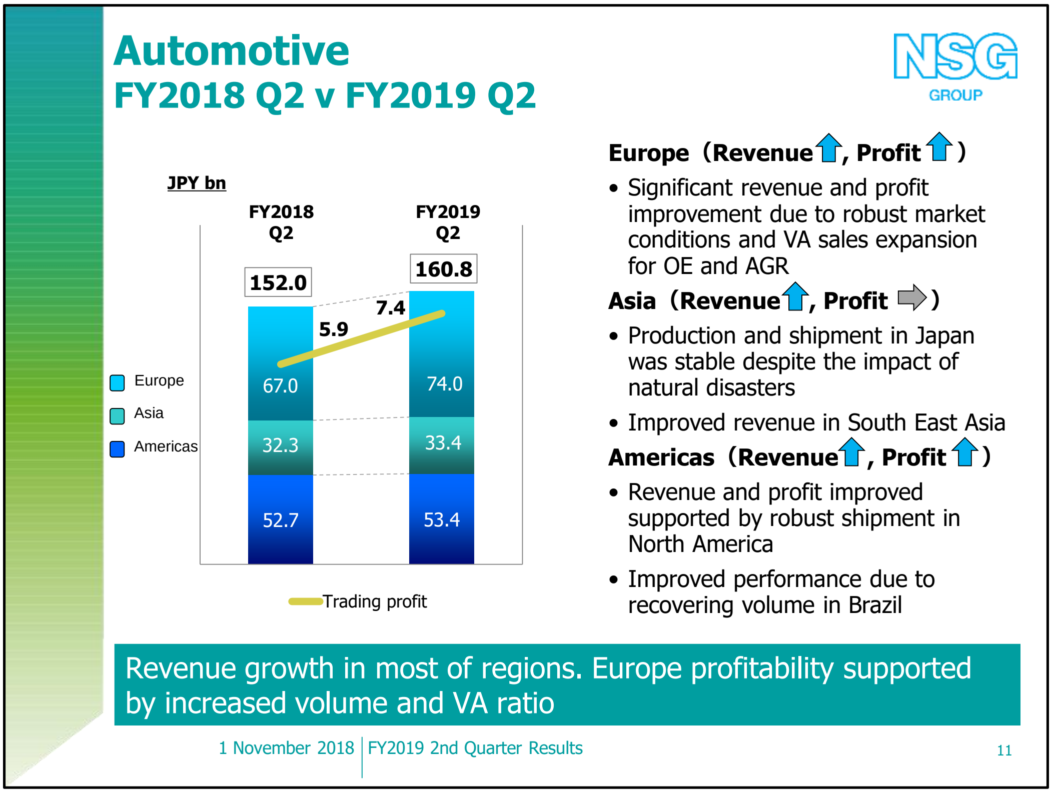

Turning to slide 10, I will discuss the results of each of the Group's businesses. In this slide, we can see the performance of the Group's Architectural businesses.

The revenue in our Architectural business increased by 4% from the previous year to 121.7 billion yen, but the profit decreased by 1.4 billion yen to 11.9 billion yen.

In Europe, revenues increased, supported by robust demand and improved volumes and prices, but the profit decreased due to a float repair in Germany and increased energy-related input costs.

In Asia, revenues in Japan improved, but the profit was adversely affected by increased input costs due to the oil price hike. In South East Asia, both revenues and profits improved,  benefitting from robust shipment of Solar energy glass.

In North America, revenues improved with robust market demand, in addition to the effect of restarting the Ottawa facility. On the other hand, profit was reduced due to temporary production cost increases. South American markets remain robust, but recorded lower revenues and profits due to hyperinflationary accounting adjustments. These adjustments are explained in more detail on a slide in the appendix.




Slide 11 is the Group's Automotive businesses.

Automotive businesses recorded a revenue of 160.8 billion yen, which is an increase of 6% from the previous year. Profit increased by 25% to 7.4 billion yen.

In Europe, revenue and profit showed significant improvement due to robust market conditions and expanding VA sales.

In Asia, production and shipments in Japan were stable despite interruptions to the automotive supply chain arising from natural disasters. Revenue in South East Asia increased due to an improvement in volume.

In the Americas, North America both recorded revenue and profit improvement supported by robust shipments and improved profitability in the AGR business. In South America, business performance also improved as Brazilian volumes continue to recover. Hyperinflation is much less material for automotive business.

# Technical Glass
## FY2018 Q2 v FY2019 Q2

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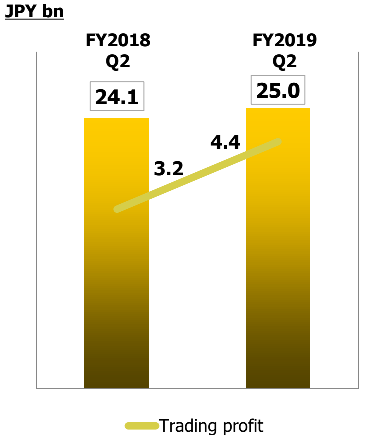


**Technical Glass**
**(Revenue ↑, Profit ↑)**

- Profit in Display improved due to higher revenue and lower cost base
- Firm demand for printer lenses
- Strong performance of glass cord in line with improving vehicle sales
- Metashine sales expansion for automotive paints and cosmetics
- Strong demand for battery separators

Improvements across all business segments



Turning to Slide 12, Technical Glass.

Revenues increased by 4% year-on-year to 25.0 billion yen. Profits also improved to 4.4 billion yen.

Display's results benefitted from higher sales and a lower cost base after the improvement actions taken in the previous year.

Demand for the components used in multi-function printers continues to be firm.

Glass cord used in engine timing belts also benefitted from strong demand, supported by improving market conditions in the automotive area.

Sales volume of Metashine increased, as demand for automotive paint and cosmetics applications was strong.

Battery separator markets were also strong, supported by demand in the automotive area.

## Redemption of Class A Shares Started (Acquisition & Cancellation)

NSG GROUP

**Considering the continued improvement in net profitability, the Group has decided to redeem a portion of its Class A shares**

Number of shares to be acquired and cancelled: 5,000

Amount: JPY5,800m including JPY750m premium and JPY50m dividends

Planned date of acquisition and cancellation: 7 December 2018

Number of outstanding shares after redemption:
35,000 (Issued value: JPY35,000m)

Redemption Policy:

- The Group's policy is to redeem Class A Shares at the earliest possible timing, considering net profit and preferred and ordinary dividends, while maintaining financial stability.
- By reducing the outstanding shares, the amount of preferred dividends and redemption premium is to be reduced.



Moving on to page 13.

As announced separately today, the Group will redeem a portion of its Class A shares.

On March 31, 2017, the Group issued Class A shares totaling 40 billion yen to improve capital adequately and stabilize its financial base.

With the Group's initiative to strengthen the earnings base and to reduce finance costs, the Group's net profit has steadily improved and finance costs have been reduced significantly.

In order to facilitate the reduction of preferred dividends and potential redemption premiums, the Group's Board of Directors resolved to commence the redemption of Class A shares.

The number of preferred shares to be acquired and canceled is 5,000 shares.

The acquisition price is 58 billion yen in total, which consists of a redemption value of 5 billion yen, premium of 750 million yen and a preferred dividend of 50 million yen.

The acquisition / cancellation date is scheduled for December 7, 2018.

After this redemption, the number of Class A shares yet to be redeemed will be 35,000 shares (issue price: 35 billion yen).

Regarding the remaining Class A shares, the Group intends to redeem them as early as possible, while maintaining financial stability, taking account of net profits, and both preferred and ordinary dividends.

# Distribution of Centennial Commemoration Dividends

**Based on the second quarter results in line with forecast, the dividend distribution of JPY10 per share to commemorate the centennial has been declared as planned.**

| | FY2019 (Interim) | FY2019 (Q4 forecast) | FY2019 Total forecast |
|---|---|---|---|
| Ordinary (JPY/share) | - | 20 | 20 |
| Commemoration (JPY/share) | 10 | - | 10 |
| Total Ordinary Dividend | 10 | 20 | 30 |
| Dividend Amount (JPY bn)<br>(Ordinary Dividends)<br>(Preferred Dividends) | 2.0<br>(0.9)<br>(1.1) | 2.8<br>(1.8)<br>(1.0) | 4.8<br>(2.7)<br>(2.1) |
| Consolidated Payout Ratio (Ordinary) | | | 23% |

<u>Reference: Dividend Policy</u>

The Group's dividend policy is to secure dividend payments based on sustainable business results.

Once Class A Shares are fully redeemed, the Group will aim to maintain a consolidated dividend pay-out ratio of 30 percent.



Page 14 discusses the dividends on ordinary shares.

The NSG Group will celebrate its 100th anniversary on November 22, 2018.

At our financial results presentation in May, we announced the distribution of centennial commemoration dividends in the interim term. Based on the second quarter results being in line with forecast, the dividend distribution of 10 yen per share to commemorate the Group's 100th anniversary has been declared as planned.

Regarding ordinary dividends as of the end of March 2019, we anticipate 20 yen per share, as forecasted at the beginning of this fiscal year.

## Summary

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### FY2019 Q2 Results

- Year-on-year revenue growth and profits in line with forecast
- Steady VA shift progress, particularly in Europe. Markets remain stable
- Cost push from increased oil prices
- Significant increase in net profit due to reduced finance costs and one-off factors
- Centennial commemoration dividend declared as planned
- Commencing redemption of Class A Shares, reflecting the continued improvement in net profit

### FY2019 Forecast

- No revision to the forecast, as Second Quarter results were in line with our expectations
- Increase in input costs to be carefully monitored
- Actions being taken to deliver the sixth year of trading profit growth



Moving to slide 15, this is the summary of the FY2019 Second Quarter Results.

Second quarter revenues and profits improved year-on-year, which is in line with our forecast.

Steady progress in VA shift and stable market conditions supported the revenue growth. Profit increased with improved profitability in Automotive Europe and Technical Glass absorbing  input costs increases.

In addition to the operating performance being in line with forecast, the reduction in finance costs and a one-off gain recorded in the share of joint ventures and associates lead to the significant improvement in net profit.

As the Group continues to improve its net profit, the redemption of Class A shares will commence. A centennial commemoration dividend has been declared as planned.

For the outlook of the remainder of the year, following the steady second quarter results, the Group expects the annual results to be in line with forecast. There are no changes to the forecast.

## Medium-term Plan (MTP) Phase 2

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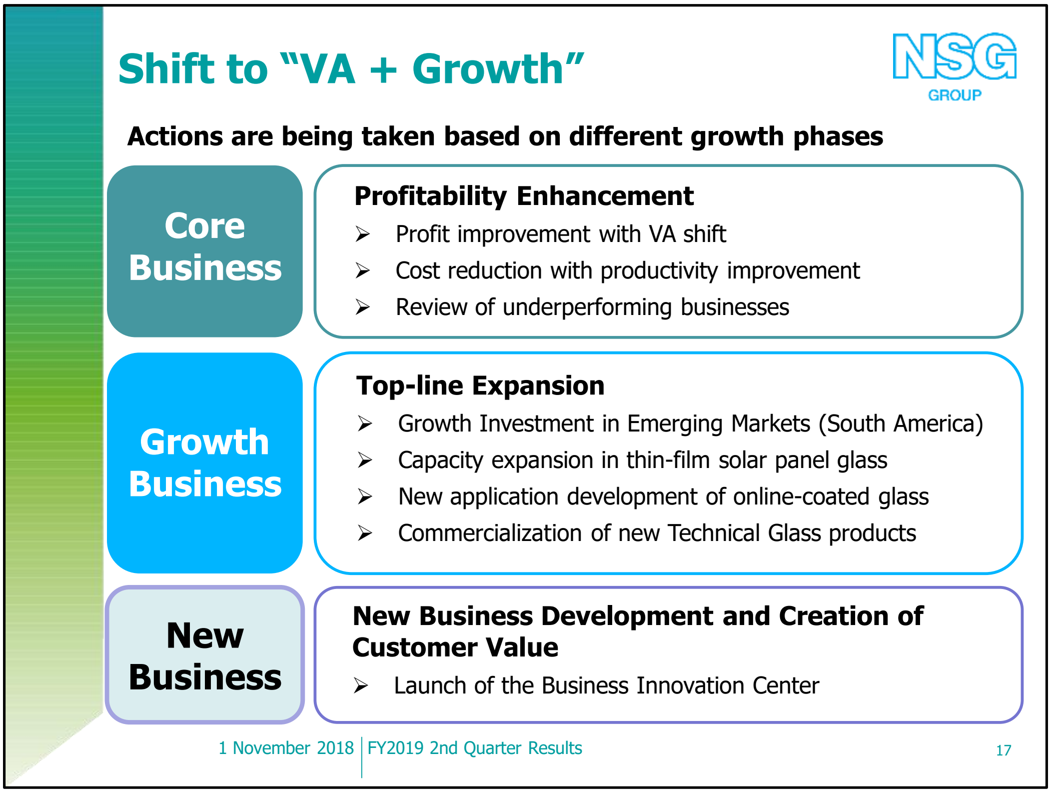
**FY2019 Approach**

**– Shift to "VA + Growth"**



From here, I will provide an update on the Medium-Term Plan (MTP) Phase 2 and the various actions we have taken during the first half of FY2019 based on this year's policy, Shift to "VA + Growth".




Please move to slide 17.

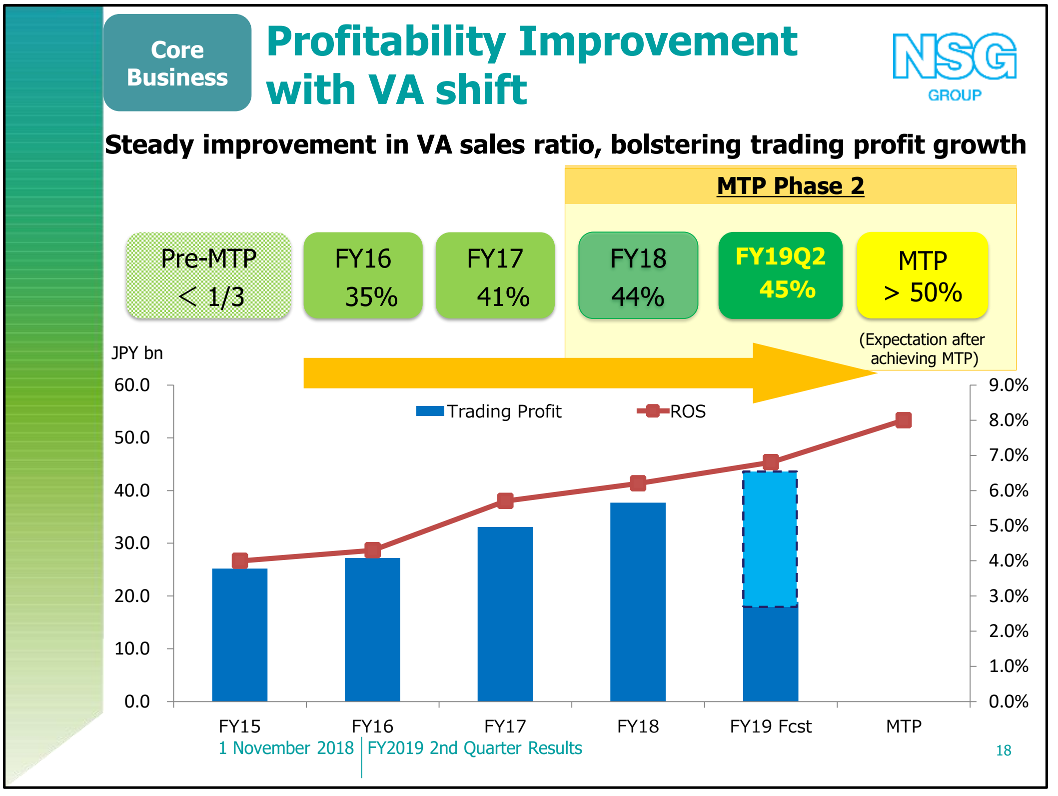
This slide was already shown at the results announcements in May, explaining actions being taken or to be taken for each stage of the three business developments: core business; growth business; and new business.

In the core business area, actions are aimed at improving profitability.

In the growth business, we are taking or will take measures to profitably expand the top line.

In the new business segment, we launched a new organization, Business Innovation Center, in July.

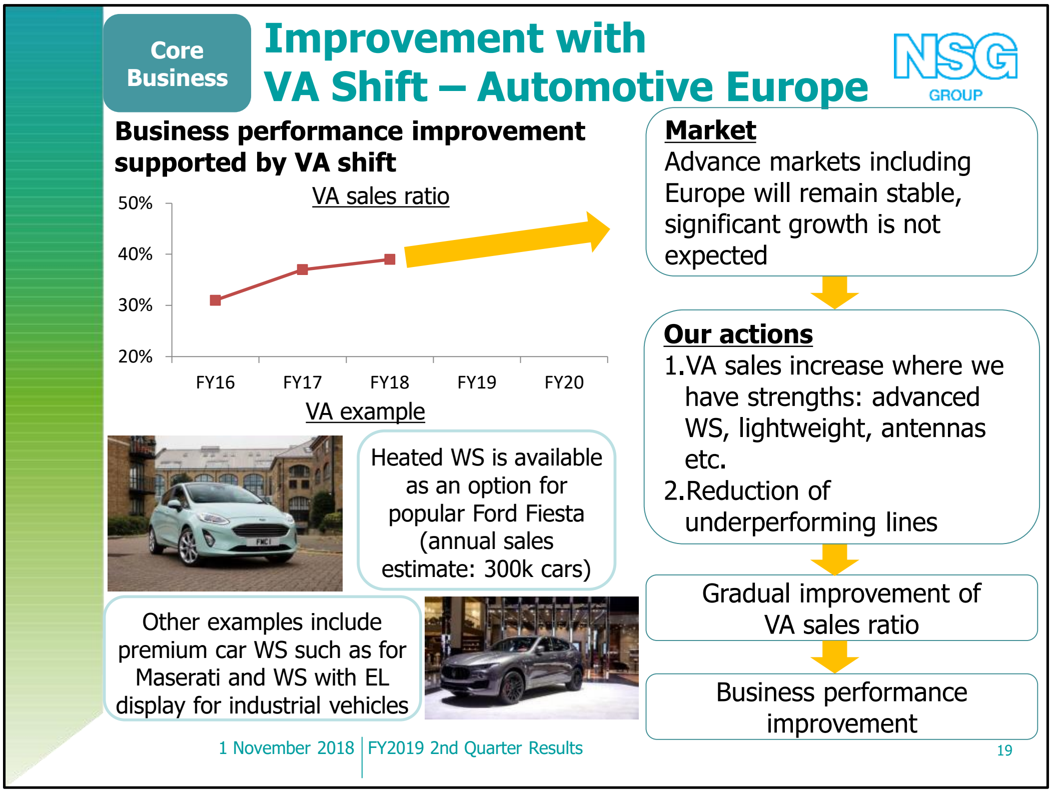
I will explain mainly about the core and growth business actions today in later slides.




Moving to Slide 18.

In improving profitability of the core business, the first area of actions we are taking is to increase the sales mix of higher value-added products, i.e. VA products.
The target of VA sales ratio is more than 50 percent after the achievement of the MTP.
It was 45 percent at the end of FY19Q2 and we are making a steady progress toward 50 percent.
The lower half of this slide shows the trend of trading profit and ROS (return on sales).
While the profit improvement has been bolstered by our efforts to reduce the cost base through various cost saving measures, you can see that the increase in the VA sales ratio also contributes to profitability improvement.
The ROS at the end of the second quarter was 6.1 percent but we forecast trading profit to be JPY43.0 billion for FY2019 full year and ROS to rise up to 6.8%.

| (Ref.) | | Trading profit | ROS |
|---|---|---|---|
| FY2018 | Results | JPY37.7bn | 6.2% |
| FY2019 | Forecasts | JPY43.0bn | 6.8% |




On slide 19, I would like to talk about the improvement of the Automotive business in Europe, a specific example where we are making a good VA progress.

It is said that once-in-a-century technical innovations are unfolding in the automotive industry. In Europe, there are leading technological advancements being made. More and more cars are equipped with value-added glass, such as windshield with a head-up display.

We are seeing the benefits of this VA shift, building on the cost base improvement we have been achieving through productivity improvement and cost saving activities.

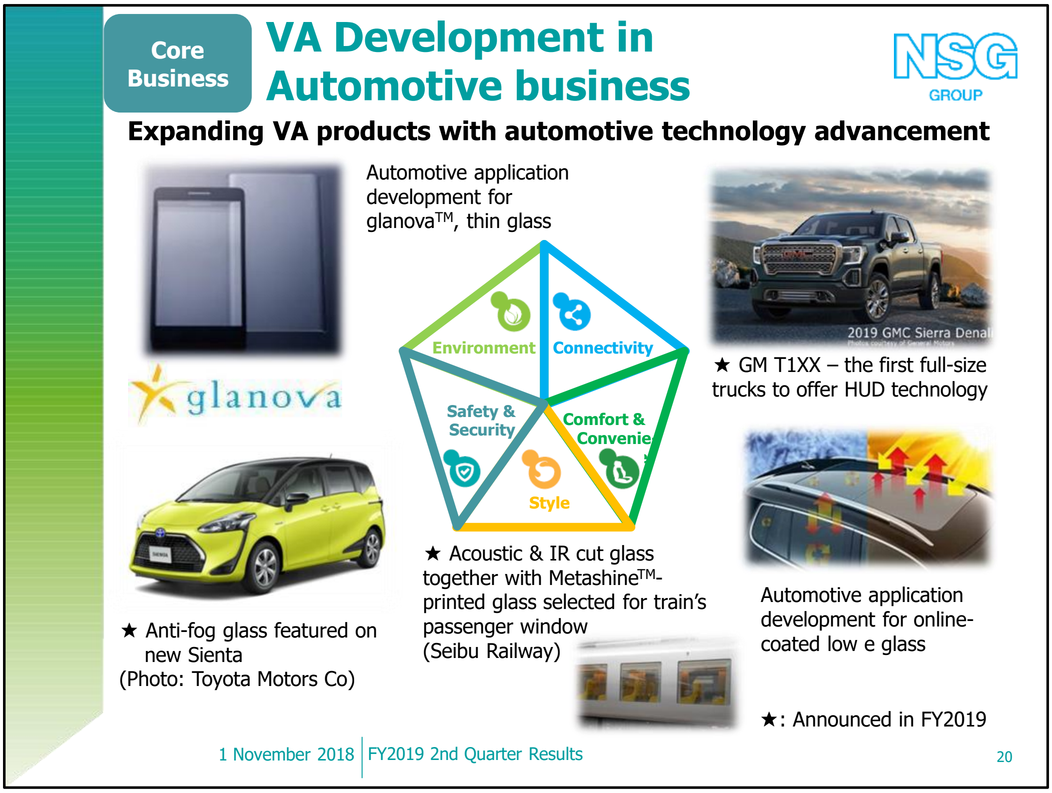
If you look at the external environment, in mature markets such as Europe, the demand is stable but we cannot expected it to grow significantly going forward.
Therefore, we are focusing on improving our VA ratio, in the areas we have strengths, such as high precision windshields, lightweight glass and glass antennas, while consolidating and eliminating underperforming production lines, to improve our business performance.

The VA products adopted are increasing in volume. For example, the Ford Fiesta in the slide is a very popular car in Europe, with an annual sales

estimate of around 300,000 cars.  Our heated windshield is available as an option, which is also very popular and it is said about 60 percent of the users choose this.
Other VA examples include windshield for premium cars such as Maserati and the premium German marques.

Another unique example is a windshield with EL display for industrial vehicles such as tractors.

I believe these innovative developments will be rolled out globally and will provide us with more exciting opportunities.




Slide 20 shows a wider VA approach that we are taking in relation to the automotive industry.

We are looking at multiple aspects of the automotive industry, in response to changing needs and developing technologies.

This financial year alone, we have had interesting developments, such as a windshield with anti-fog functionality and a windshield with HUD for pickup trucks.

In addition to these conventional Automotive Glass business areas, we have other capabilities where we can contribute to the development of the automotive industry.

One other promising opportunity is applying our proprietary online coating technology, developed in the Architectural Glass business, to automotive windows.

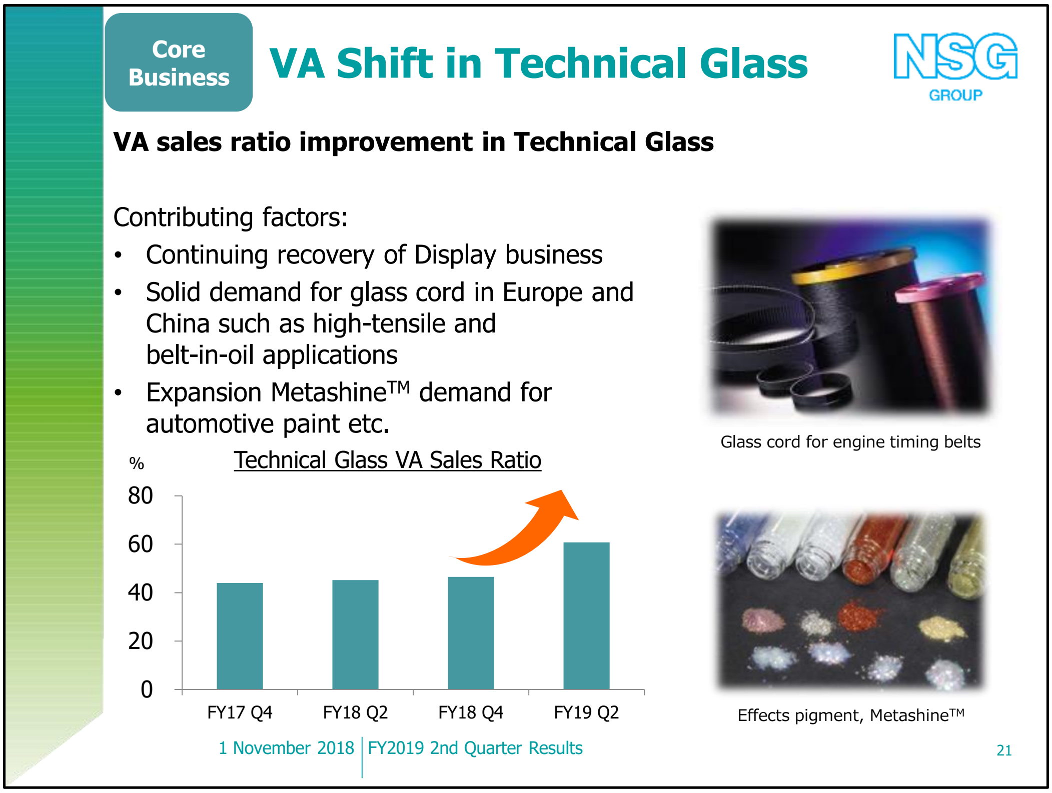
Another opportunity we are exploring is the application of Technical Glass products for automotive applications.

Development and marketing efforts are underway to promote thin display glass, glanova™, for automotive usage, such as lightweight windshields and displays inside the car.

This week we announced that Metashine™, effect pigment based on glass flake, is to be printed on the passenger car glass of a new train.

This was made possible by effective cross business collaboration between the Automotive and Technical Glass businesses.

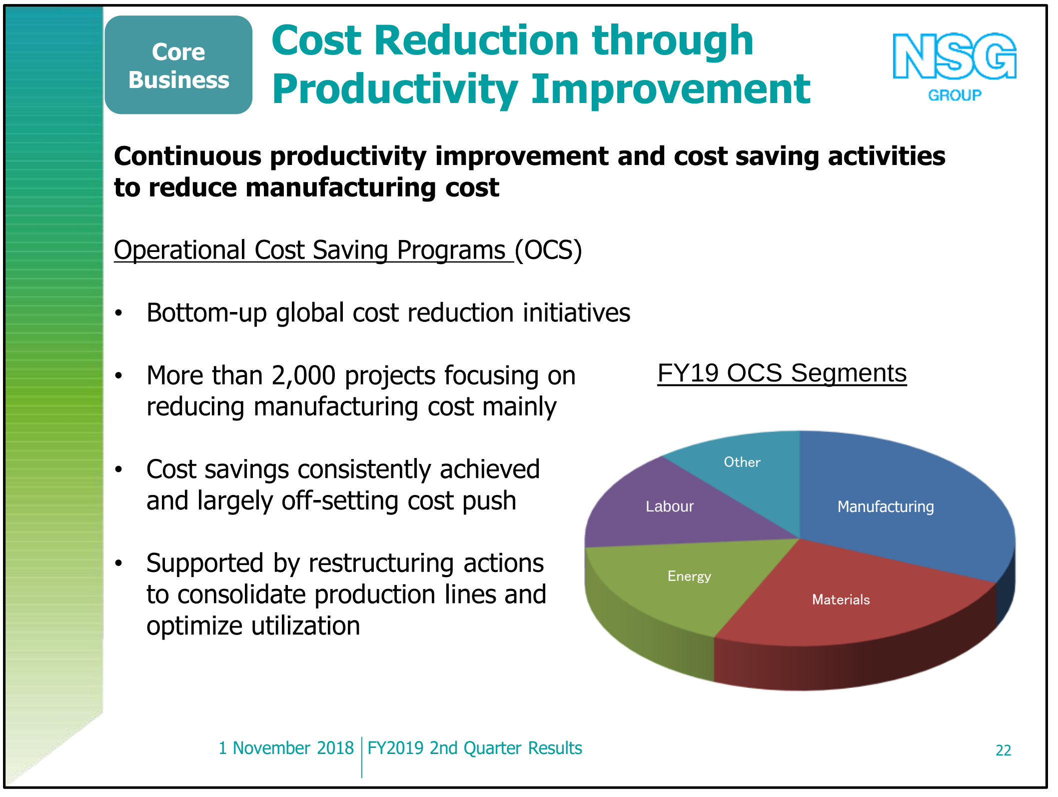
By proactively catering to the needs of the automotive market, we can develop promising new opportunities.  I am very enthusiastic about further developments going forwards.




Slide 21 shows that we are also making progress in the VA sales ratio in the Technical Glass business.

The Technical Glass business used to have a high VA ratio, as it consists of unique value added product segments.
However, over the last several years, it had been impacted by a performance slowdown in the Display business, due to intensified competition.
We took swift and bold decisions to turn it around, such as putting the float line in Vietnam on hold in FY2016 and last year we closed a fabrication site in China.
As a result, the improvement of the business is boosting the VA sales ratio increase of the Technical Glass business.

Besides the Display business, the glass cord business is strong, with growing demand mainly in Europe and China.
A unique glass-flake-based-pigment, Metashine™, is seeing an expansion of applications, although currently it is still small in revenue.



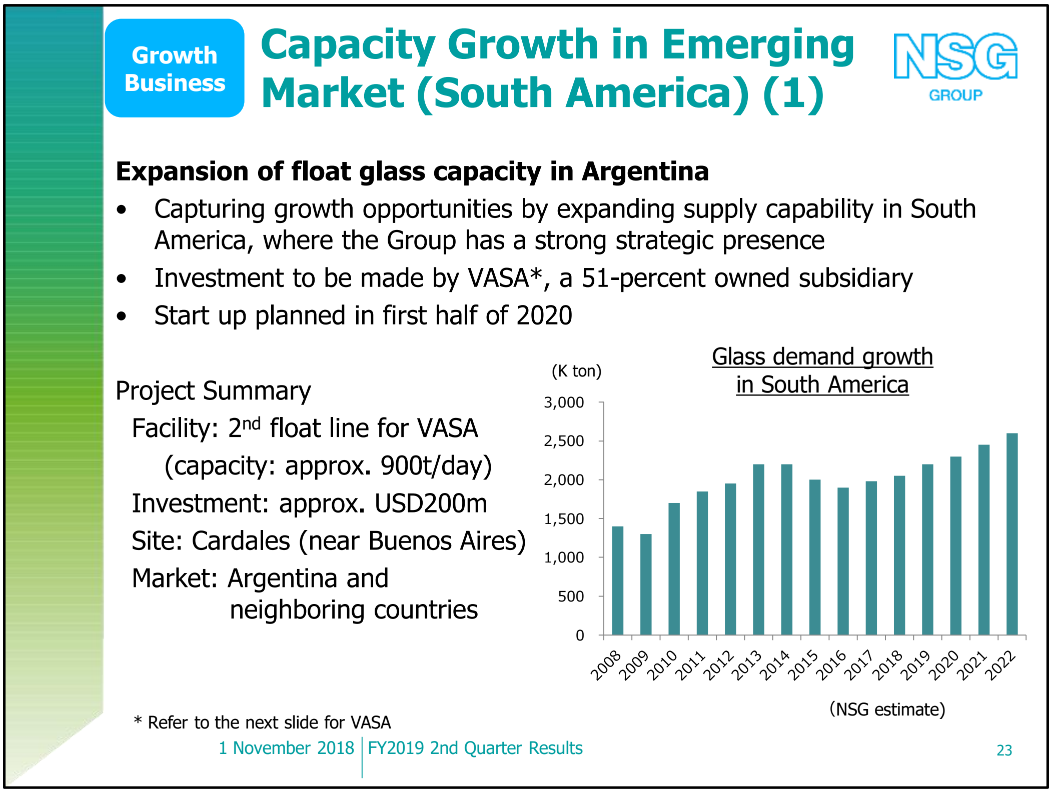

Turning to slide 22.

As another pillar of measures to strengthen profitability of the core business, we are also working hard to reduce cost through productivity improvement.

This slide shows our group-wide manufacturing cost reduction activities, called "Operational Cost Saving Programs".

This is a bottom-up global cost reduction program, and we are carrying out more than 2,000 initiatives annually.
As shown in the chart at the bottom right, the program covers a wide range of themes such as manufacturing, raw materials, energy and labor costs.

In addition to these cost savings initiatives to off-set inflationary cost push, we are also taking restructuring actions such as consolidating production lines to optimize our capacity utilization.




Moving on to slide 23, now I am talking about the growth business.

Here, the main target is to profitably expand the topline and we have taken a few major decisions in this financial year.

Specifically they are: the decision to expand the solar glass production capacity; and to add another float line in Argentina.

This slide shows a summary of the investment in a new float plant to be made in Argentina, capturing the opportunity of growing South American glass markets.

We have long established a solid position in the region and it is a promising emerging market with a significant growth potential.

Currently Argentina is facing a shortage of glass and is importing from neighboring countries.

With the new manufacturing footprint in Argentina, we are aiming for further solidifying our position in South America.

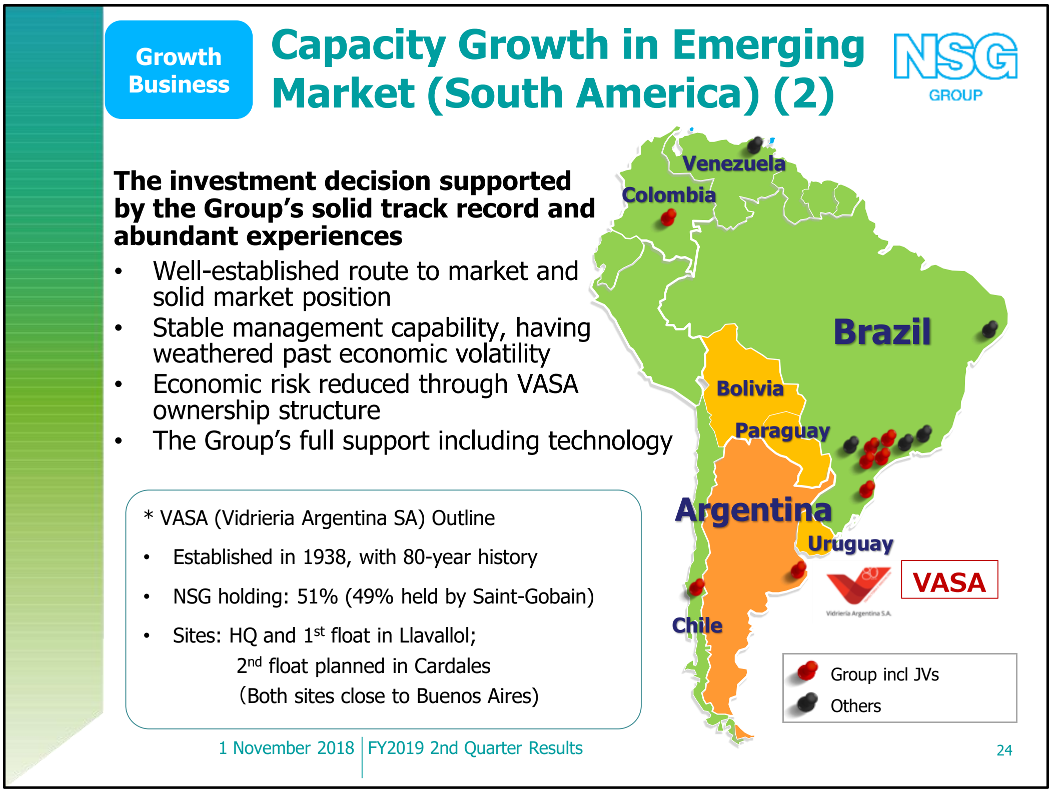
The investment of approximately USD200m is to be made by our subsidiary in

Argentina, VASA.

The line is planned to start up in the first half of 2020.

This is going to be VASA’s second float line with the production capacity of approximately 900 ton per day.

VASA’s customers are not only in Argentina but also in the neighboring countries.




Turning to slide 24.

As you know, recently, Argentina has been facing challenging economic situation.

You may ask why we made the decision to invest in the country now but it is a decision we made after carefully considering the business case.

First of all, VASA has a long history in the country, operating near Buenos Aires for 80 years since 1938.

Also, it is the sole flat glass manufacturer in Argentina.

With well-established routes to market and a solid market position in Argentina and other countries in the region, VASA's management capability made it possible for the company to weather many ups and downs in the economy over the past 80 years with a good track record.

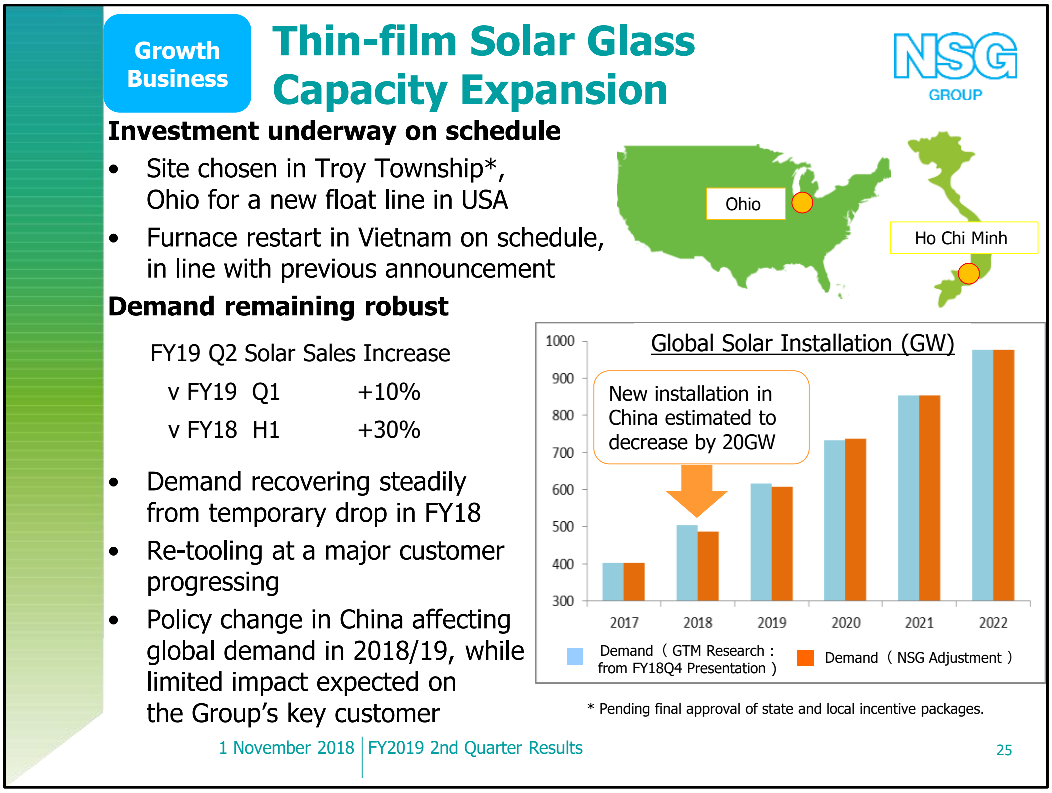
Through its capital structure, we are in a position to share the financial risk to some extent.

Needless to say, the Group provides full backup service to support the entity in areas such as technology.

Based on these factors, we decided to make an investment so that we can capture the growth opportunity.

As you can see, the Group operates not only in Argentina but also in other countries in South America.

We intend to maintain and leverage our strategic advantage for further development in the region.




Moving on to slide 25.

This slide is about another growth investment we announced this year.

At the full-year results announcement back in May, I explained that we had decided to invest in new solar glass capacities: a new line in the US and a restart of existing line in Vietnam.

Both projects are progressing as planned.

Recently we announced about the site selection in the US, in the Troy township in Ohio, pending final approval of state and local incentive packages.

The conversion of the line in Vietnam to production of glass for solar energy has started and is on schedule.

At the same time I would like to take this opportunity to provide an update on the market.

Last financial year, in FY2018, demand for solar glass temporarily decreased due to the re-tooling at our major customer.

From early CY2018, the volume has been recovering and we are seeing the continuing trend into FY2019.

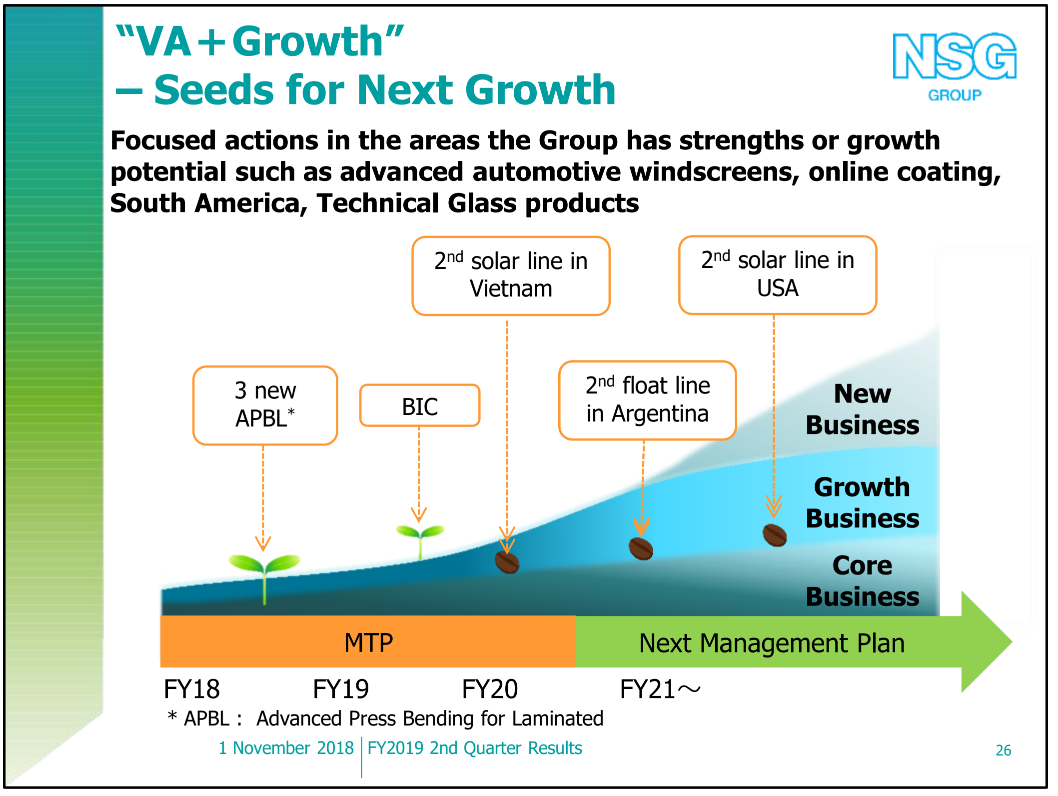
Our revenue for the second quarter has recovered by 10 percent over the first quarter, and cumulatively 30% year-on-year.

The re-tooling at the customer is steadily progressing and I believe it is close to completion.

There was a solar subsidy policy change in China in June 2018, which is expected to impact the global solar market.

However, based on the fact that our main customer’s major market is in the US and focuses on mega-solar applications, we expect the impact on that customer will be limited.

The current demand is solid.

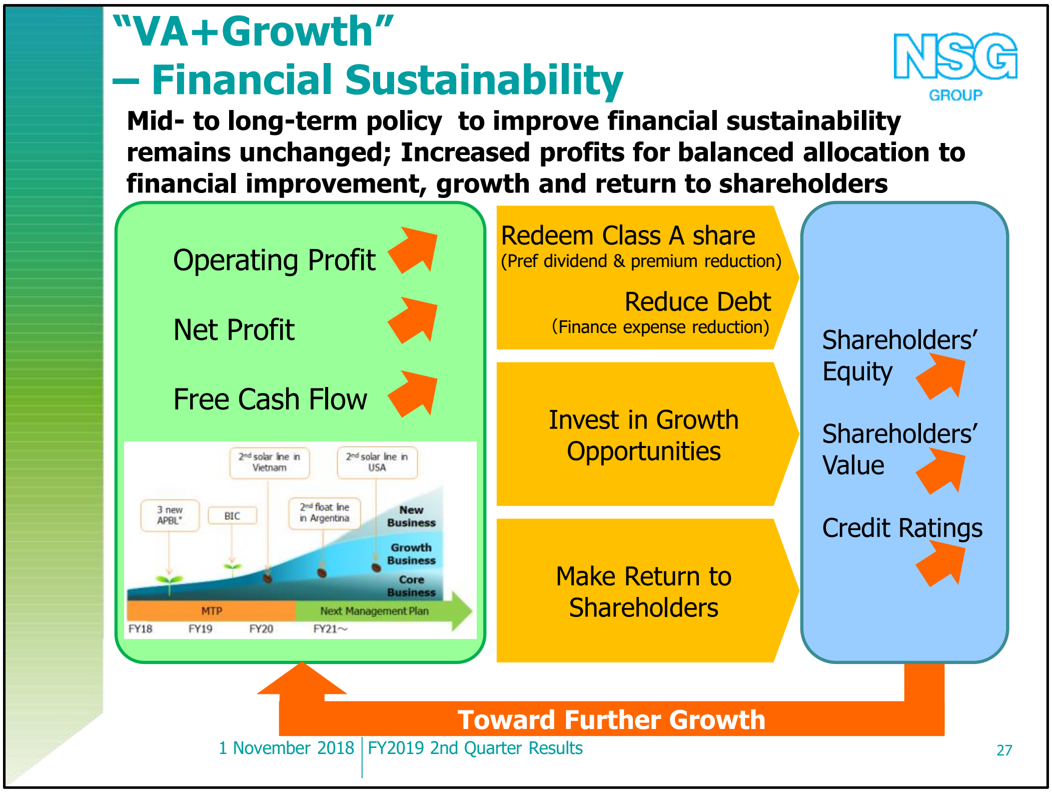



Please move to Slide 26.

In a nutshell, our actions under this year's policy, Shift to"VA + Growth", are like planting seeds for the future, beyond the MTP.

We are focusing our actions on where we have strengths, such as in high precision windshields, online-coated products including solar glass, emerging markets including South America and Technical Glass areas.

These actions may not necessarily bear their fruits within the period of the MTP but nonetheless we are determined to take necessary actions in a timely manner with a view to developing the Group further and increasing corporate value.

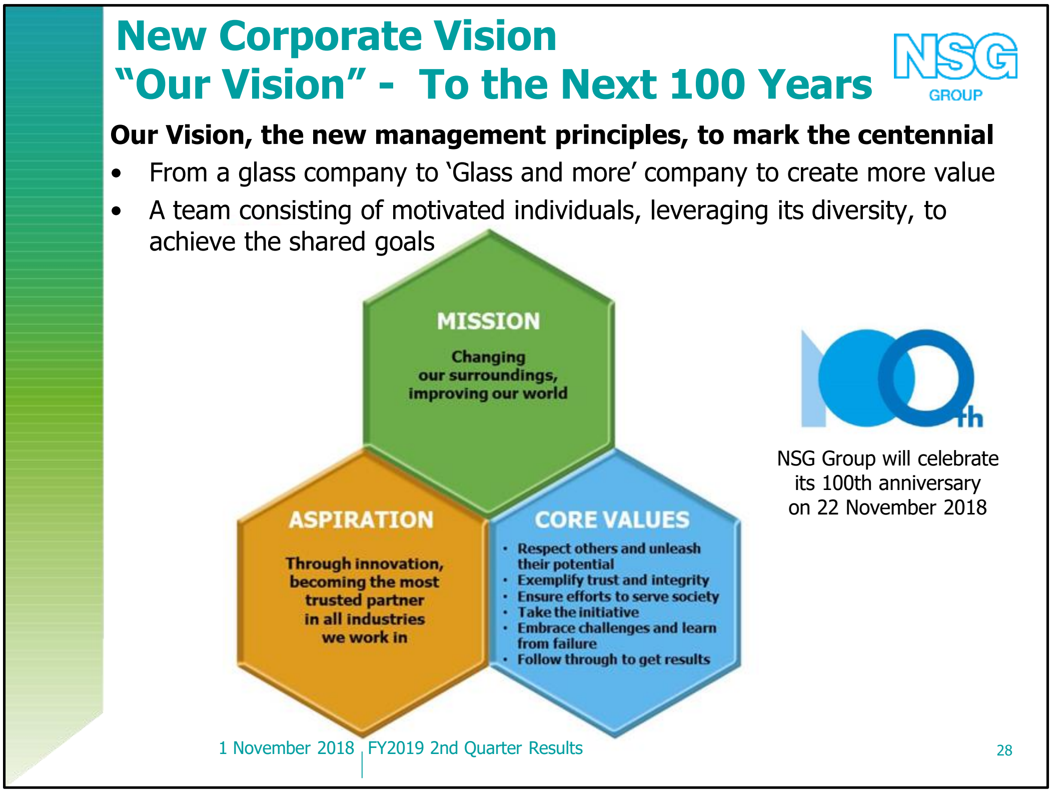



Turning to Slide 27.

We acknowledge that additional growth investments have a short-term negative impact on our financial ratios.
However, when we look to the future of our Group, we believe that these are necessary.

Therefore, we intend to utilize our operating and net profits as well as free cash flow to be generated from the growth investments, to improve the Group's medium to long term financial sustainability.
Then, it will lead to more capital being available for investment in further growth.
Improving financial sustainability remains our priority and there has been no change to our resolve to improve our financial stability over the medium to long term.

We will take a balanced approach in allocating increased profits, aiming at improving our financial base, investing in future growth and increasing the return to our shareholders.




Lastly in slide 28. I would like to introduce a new corporate vision, "Our Vision" as announced today.

With the assistance of all our stakeholders, we have conducted business over the last 100 years and will celebrate the centennial on 22 November 2018.

To commemorate the occasion we have formulated new management guidelines. The new Vision will also become the foundation of our long-term vision, explained over the last few slides.

Our Vision defines our mission as "changing our surroundings, improving our world".
We intend to become something more than a glass manufacturer, creating new value through providing services and other added values to our products.

Our aspiration is "through innovation, becoming the most trusted partner in all industries we work in".
We also identified the six core values that all of us in the Group share, as shown in the chart.

In order to realize the mission and aspiration, our organization must evolve. I would like to describe it as a team consisting of motivated individuals, leveraging its diversity, to achieve the shared goals.

We would like to express our gratitude to all the stakeholders for their support over one century and would like to ask their continued support and direction going forward.

## Summary

### FY2019 Q2 Results

- Year-on-year revenue growth and profits in line with forecast
- Steady VA shift progress, particularly in Europe. Markets remain stable
- Cost push from increased oil prices
- Significant increase in net profit due to reduced finance costs and one-off factors
- Centennial commemoration dividend declared as planned
- Commencing redemption of Class A Shares, reflecting the continued improvement in net profit

### FY2019 Forecast

- No revision to forecast based on Second Quarter results in line with plan
- Increase in input costs to be carefully monitored
- Actions being taken to deliver the sixth year of trading profit growth

### Medium-term Plan (MTP) Phase 2 Update

- Accelerating actions based on Shift to "VA + Growth"
- Investing in new capacity to solidify the established position in growing South America
- "Our Vision" announced at the timing of the 100$^{th}$ anniversary

1 November 2018 | FY2019 2nd Quarter Results 29

Slide 29 is a summary of this presentation.

Our revenue and profits for the first half of FY2019 grew year-on-year and were in line with our forecast.

Based on the results, our forecast for the full year remains unchanged.

We made a decision to start redeeming Class A Shares, reflecting the continued improvement of the Group's net profit.

The commemoration dividend will be distributed as announced previously.

Our Group is executing the Medium-term Plan Phase 2 and redoubling our efforts under the new policy, Shift to "VA + Growth", for FY2019、

In the core business segment, the benefits of further progress in VA shift and previous cost reduction efforts are steadily materializing, though there are some differences in speed between businesses and regions.

In the growth business area, we decided to make two major investments: expansion of capacity of glass for solar energy and a new float line for the growing South American market.

We expect these investments to be key elements that underpin the future growth of the Group.

As we are celebrating the 100th anniversary this year, the new Vision has been announced.

We will continue to work as a team to develop the Group further and improve our corporate value.

# Notice

NSG GROUP

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 environment in major markets, product supply/demand shifts, and currency exchange fluctuations.

Nippon Sheet Glass Company, Limited

# Appendices

- FY2019 2nd Quarter Results
  - Revenue by Business & Regions
  - Trading Profit by Business & Regions
  - Consolidated Balance Sheet
  - Consolidated Cash Flow
  - Exceptional items
  - Exchange Rates
  - Hyperinflation accounting in Argentina

- Medium-term Plan (MTP) Phase 2
  - Summary of Medium-term Plan (MTP) Phase 2
  - Financial KPIs
  - News Releases (April 2018 to October 2018)

# Revenue by Business & Regions
## FY2018 Q2 v FY2019 Q2

NSG GROUP

| (JPY bn) | FY2018 2nd Quarter* | FY2019 2nd Quarter | Change |
|---|---|---|---|
| **Architectural** | **117.5** | **121.7** | **4.2** |
| Europe | 46.6 | 49.6 | 3.0 |
| Asia | 41.2 | 43.5 | 2.3 |
| Americas | 29.7 | 28.6 | (1.1) |
| **Automotive** | **152.0** | **160.8** | **8.8** |
| Europe | 67.0 | 74.0 | 7.0 |
| Asia | 32.3 | 33.4 | 1.1 |
| Americas | 52.7 | 53.4 | 0.7 |
| **Technical Glass** | **24.1** | **25.0** | **0.9** |
| Europe | 3.7 | 4.1 | 0.4 |
| Asia | 19.7 | 20.1 | 0.4 |
| Americas | 0.7 | 0.8 | 0.1 |
| **Other Operations** | **0.4** | **0.6** | **0.2** |
| **Total** | **294.0** | **308.1** | **14.1** |

*: Restated due to adoption of IFRS15 "Revenue from contracts with customers"
Pre-IFRS15: JPY 297.0 bn [adjustment of JPY (3.0) bn]

# Trading Profit by Business & Regions
## FY2018 Q2 v FY2019 Q2

NSG GROUP

| (JPY bn) | FY2018 2nd Quarter* | FY2019 2nd Quarter | Change |
|---|---|---|---|
| **by SBU** | | | |
| Architectural | 13.3 | 11.9 | (1.4) |
| Automotive | 5.9 | 7.4 | 1.5 |
| Technical Glass | 3.2 | 4.4 | 1.2 |
| Other | (3.8) | (4.9) | (1.1) |
| Total | 18.6 | 18.8 | 0.2 |
| **by Region** | | | |
| Europe | 9.2 | 9.5 | 0.3 |
| Asia | 7.5 | 9.0 | 1.5 |
| Americas | 5.7 | 5.2 | (0.5) |
| Other | (3.8) | (4.9) | (1.1) |
| Total | 18.6 | 18.8 | 0.2 |

*: Restated due to adoption of IFRS15 "Revenue from contracts with customers"
Pre-IFRS15: JPY 18.7 bn [adjustment of JPY (0.1) bn]

# Consolidated Balance Sheet

NSG GROUP

| (JPY bn) | 31-Mar-18* | 30-Sep-18 | Change |
|---|---|---|---|
| **Assets** | **788.6** | **781.6** | **(7.0)** |
| **Non-current assets** | **530.8** | **532.6** | **1.8** |
| Goodwill & intangible assets | 169.7 | 169.6 | (0.1) |
| Property, plant and equipment | 244.1 | 244.8 | 0.7 |
| Other | 117.0 | 118.2 | 1.2 |
| **Current assets** | **257.8** | **249.0** | **(8.8)** |
| Cash and cash equivalents | 64.8 | 53.0 | (11.8) |
| Other | 193.0 | 196.0 | 3.0 |
| **Liabilities** | **644.9** | **634.1** | **(10.8)** |
| **Current liabilities** | **255.0** | **192.8** | **(62.2)** |
| Financial liabilities | 97.6 | 50.1 | (47.5) |
| Other | 157.4 | 142.7 | (14.7) |
| **Non-current liabilities** | **389.9** | **441.3** | **51.4** |
| Financial liabilities | 275.1 | 327.2 | 52.1 |
| Other | 114.8 | 114.1 | (0.7) |
| **Equity** | **143.7** | **147.5** | **3.8** |
| Shareholders' equity | 135.2 | 138.9 | 3.7 |
| Non-controlling interests | 8.5 | 8.6 | 0.1 |
| **Total liabilities and equity** | **788.6** | **781.6** | **(7.0)** |

*: Restated due to adoption of IFRS15 "Revenue from contracts with customers"

[Assets] Pre-IFRS15: JPY 791.9 bn - adjustment of JPY (3.3) bn

[Equity] Pre-IFRS15: JPY 142.8 bn - adjustment of JPY +0.9 bn

# Consolidated Cash Flow Summary

NSG GROUP

| (JPY bn) | FY2018 2nd* Quarter | FY2019 2nd Quarter |
|---|---|---|
| Profit for the period | 5.5 | **10.0** |
| Depreciation and amortization | 14.4 | **14.2** |
| Net impairment | 0.3 | **(0.2)** |
| Gain on disposal of assets | (2.4) | **-** |
| Share of profit from joint ventures and associates | (1.0) | **(3.8)** |
| Tax paid | (2.8) | **(3.4)** |
| Others | (0.9) | **-** |
| **Net operating cash flows before movement in working capital** | 13.1 | **16.8** |
| Net change in working capital | (7.8) | **(13.7)** |
| **Net cash flows from operating activities** | 5.3 | **3.1** |
| Purchase of property, plant and equipment | (13.4) | **(11.7)** |
| Disposal proceeds | 1.5 | **0.1** |
| Others | (0.5) | **(0.7)** |
| **Net cash flows from investing activities** | (12.4) | **(12.3)** |
| **Free cash flow** | (7.1) | **(9.2)** |

*: Restated due to adoption of IFRS15 "Revenue from contracts with customers"
(Total free cash flow is not affected)

# Exceptional Items

NSG GROUP

| (JPY bn) | FY2018 2nd Quarter | FY2019 2nd Quarter |
|---|---|---|
| Reversal of impairment of non-current assets | - | **2.7** |
| Gain on disposal of investments in JVs | 1.5 | **-** |
| Gain on settlement of insurance proceeds | 1.0 | **-** |
| Impairment of non-current assets | (0.2) | **(2.5)** |
| Restructuring costs | (2.2) | **(1.3)** |
| Suspension of facilities | (2.1) | **-** |
| Other items | 0.2 | **(0.1)** |
| | (1.8) | **(1.2)** |

# Exchange Rates

NSG GROUP

| | FY2018 2nd Quarter | FY2018 | FY2019 2nd Quarter |
|---|---|---|---|
| Average rates used: | | | |
| JPY/GBP | 144 | 147 | 147 |
| JPY/USD | 112 | 111 | 111 |
| JPY/EUR | 126 | 130 | 130 |
| JPY/ARS | 6.74 | 6.30 | - |
| Closing rates used: | | | |
| JPY/GBP | 151 | 150 | 148 |
| JPY/USD | 113 | 106 | 113 |
| JPY/EUR | 132 | 132 | 132 |
| JPY/ARS | 6.42 | 5.30 | 2.84 |

# Argentina Hyperinflation accounting

NSG GROUP

## Treatments adopted from Q2 FY2019

- In accordance with IAS29 rules, hyperinflation accounting adopted for Argentina subsidiaries from Q2 FY2019
  - Property, plant and equipment, and related deferred taxation balances restated to measuring unit current as at 30 September 2018
  - Hyperinflation adjustments applied to current year income statement and cash flow
  - Opportunity cost loss on monetary items recorded as a financial expense
  - Income statement and cash flows consolidated using closing rates of exchange

## Financial impact at Q2 FY2019 (JPY bn)

| | |
|---|---|
| Consolidated income statement | |
| Revenue | (1.9) |
| Operating profit | (0.5) |
| Profit after taxation | (1.3) |
| *Attributable to:* | |
| Non-controlling interest | (0.5) |
| Owners of the parent | (0.8) |
| | |
| Consolidated balance sheet | |
| Property, plant & equipment | 3.4 |
| Deferred tax liability | (1.0) |
| | |
| Total shareholders equity | 1.4 |
| Non-controlling interest | 1.0 |
| Total equity | 2.4 |

# Medium-term Plan (MTP) Phase 2 (FY2018-FY2020)

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## Phase 2 Measures

### Growth Measures

- Drive VA No.1 Strategy
- Establish growth drivers
- Business culture innovation
- Enhance global management

### Financial Measures

- Enhance equity
- Reduce net debt
- Issue Class A Shares

## MTP Targets

- Financial sustainability
- Transform into VA Glass Company

## Financial Targets

**Net debt / EBITDA: 3x**

**ROS > 8%**

[Expectation after achieving MTP Targets]
(After redemption of Class A Shares)

- Equity Ratio: 20%
- ROE: 10%
- VA Sales Ratio: > 50%
- Trading Profit: JPY50-60 bn

VA: Value-added ROS (Return on Sales): based on trading profit (profit before amortization of non-tangible assets)

# MTP Phase 2: KPI Update

Steady improvement of KPIs toward financial sustainability

| | | MTP Phase 2 | | |
|---|---|---|---|---|
| **MTP Targets** | FY17 | FY18 | FY19 Q2 | MTP P2 / after redemption |
| **ROS** | 5.7% | 6.3% | 6.1% | > 8% |
| **Net Debt/ EBITDA** | 5.0x | 4.8x | 5.0x | 3x |

| [Reference] | | | | (Expectation) |
|---|---|---|---|---|
| Equity Ratio | 15.7% | 17.1% | 17.8% | 20% |
| ROE | 4.9% | 4.7% | 6.8% | 10% |
| VA Sales Ratio | 41% | 44% | 45% | > 50% |

# News Releases – Apr to Oct 2018

| | |
|---|---|
| Apr. 2 | 100th Anniversary launched with special website and Facebook account |
| Apr. 16 | NSG's train glass for Odakyu's Romancecar |
| Apr. 27 | NSG Group named General Motors' Supplier of the Year |
| May 11 | Production capacity expansion for solar glass |
| Jun. 18 | Establishment of "Business Innovation Center" |
| Jun. 21 | Mobile real-time PCR equipment at "BIO Tech 2018" |
| Jul. 30 | Publication of the first integrated report |
| Aug. 21 | NSG's HUD technology featured on new 2019 GMC Sierra and 2019 Chevrolet Silverado |
| Sep. 13 | NSG's anti-fog glass featured in New Toyota Sienta |
| Oct. 1 | Highest rating given for environmentally rated loan by Development Bank of Japan |
| Oct. 9 | Expansion of float glass production in Argentina |
| Oct. 22 | Location of new US solar glass plant |
| Oct. 30 | NSG's acoustic & IR-cut glass with Metashine™ print for Seibu's new express train, Laview |


(Photo courtesy of Odakyu Electric Railway)

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