NSG

GROUP

NSG GROUP

Medium-term Plan (MTP) Phase 2

Financial Strategy

(Issuance of JPY40 billion Class A Shares)

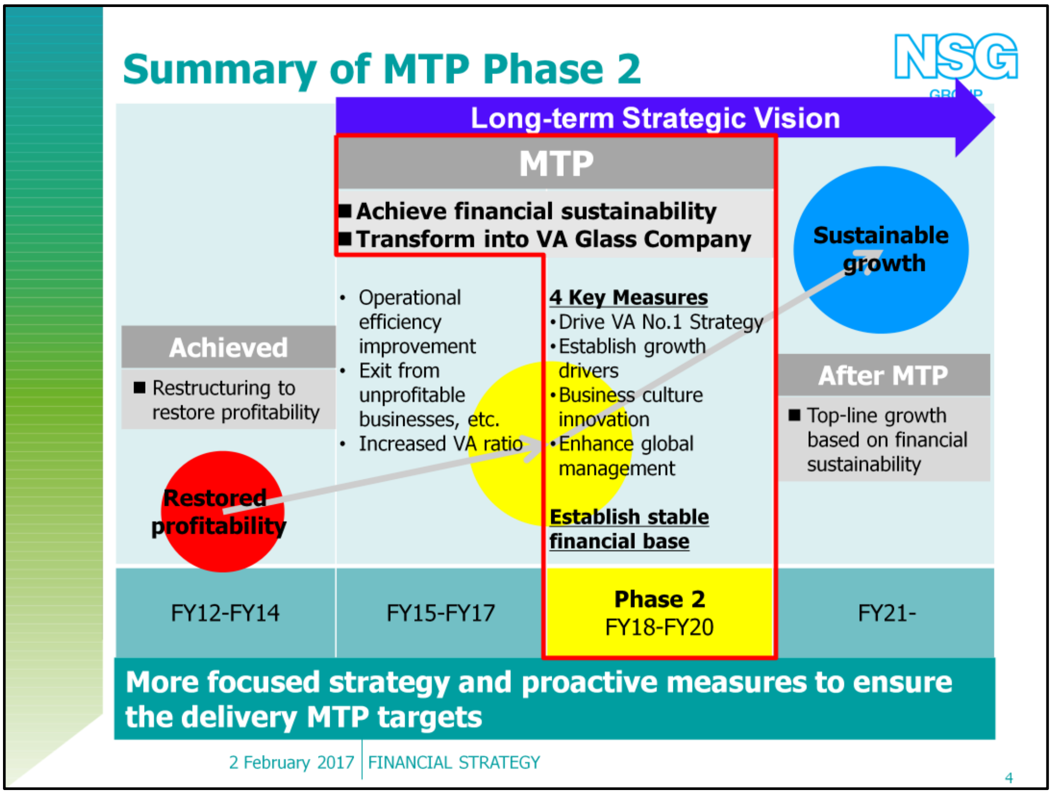
2 February 2017
Nippon Sheet Glass Co., Ltd.

On October 28 last year, NSG Group announced Phase 2 of the Medium-term Plan (MTP).

The class shares issued today are aimed at supporting Phase 2 of the MTP.

Agenda

- Summary of MTP Phase 2
- Financial Strategy
- Delivery of MTP Phase 2 Targets
- Summary



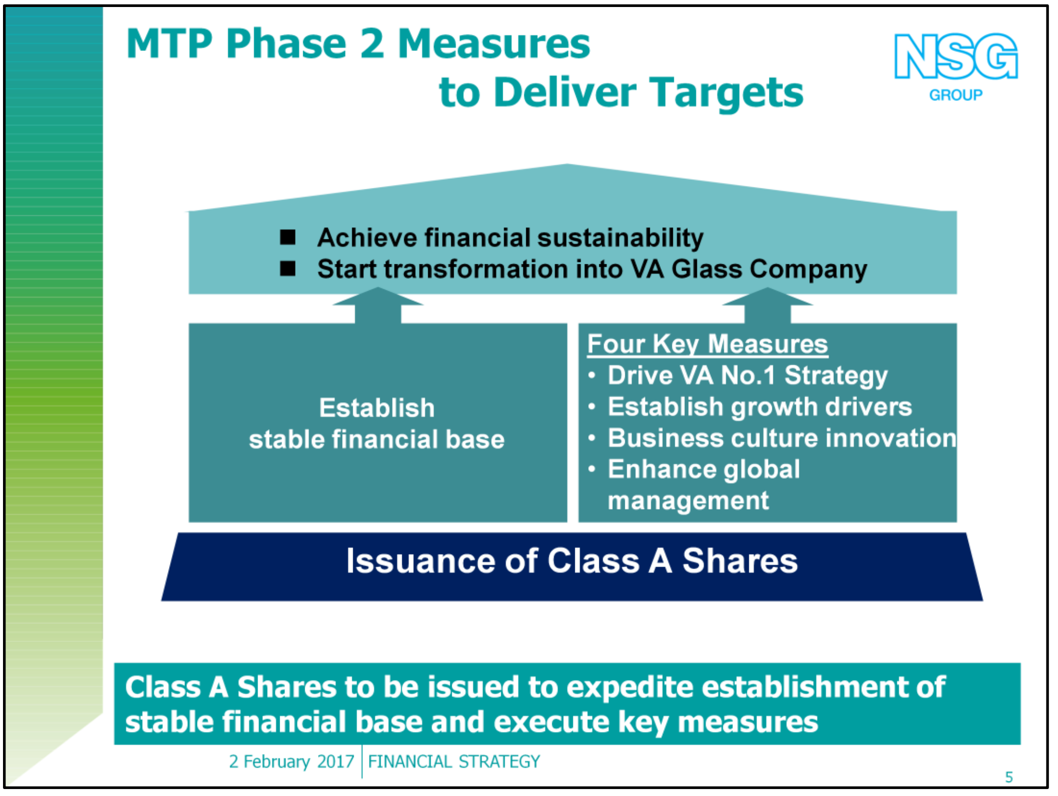
Here is the summary of MTP Phase 2.

Announced in May 2014, MTP had the original objectives of achieving financial sustainability and starting transformation into a VA Glass Company in a four-year period thru the end of FY2018.

However, due to significant changes in the operating environment of a business positioned as a growth driver and the uneven speed of profitability improvements, we announced the addition of two more years to the MTP and positioned the three-year period from FY18 to FY 20 as its Phase 2.

During Phase 2, we will take a more focused approach to ensure the achievement of MTP targets by implementing the four key measures of “Drive VA No.1 Strategy”, “Establish growth drivers”, “Business culture innovation” and “Enhance global management.”

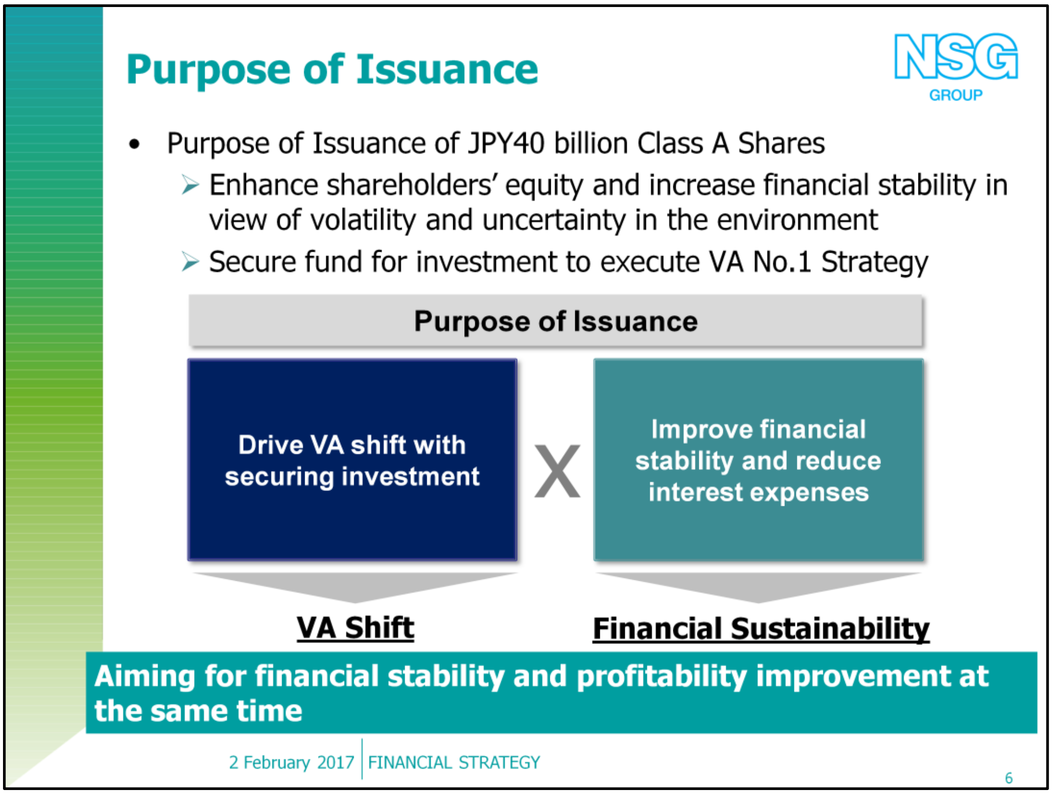
We also announced our intent to generate business profits and cash to pay down debt for establishing a stable financial base.



Now, let us explain how the issuing of class shares would support key measures of MTP Phase 2.

At the Q2 announcement, we reported a progress in increasing the ratio of VA (value-added) products and services and continuous improvements in profitability through better capacity utilization, reduced working capital , controlled capital investments and divested or downsized underperforming businesses.

Yet the reduction of expenses and improvement of balance sheet still remained as an issue for the company. The issuance of class shares announced today is intended to address these by improving the balance sheet early and building a structure for implementing key Phase 2 measures.



We are issuing the class shares to achieve two main objectives.

The first objective is to expedite the enhancement of shareholders' equity.

As seen in the extreme changes in the global economic environment last year, external environment continues to be unpredictable and volatile, and stabilizing our finance is an urgent priority.

The second objective is to secure funds for investing the key MTP Phase measures, especially the VA No.1 Strategy and establishment of growth drivers.

In this way, the class shares are aimed at stabilizing our financial base while improving profitability.

Summary of Issuance

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- Summary

Amount	JPY40 billion
Planned Allottees	Japan Industrial Solutions*1 (Funding by Development Bank of Japan, Mizuho Bank, Sumitomo Mitsui Banking Corporation, Mitsubishi Tokyo UFJ Bank) UDS Corporate Mezzanine Fund*2 (Funding by Development Bank of Japan, Sumitomo Mitsui Banking Corporation)

- Timeline
  - Extraordinary General Meeting of Shareholders: 24 March 2017
  - Issuance of Class A Shares: 31 March 2017

*1: Japan Industrial Solutions No.2 Limited Partnership
*2: UDS III Corporate Mezzanine Limited Partnership
UDS IV Corporate Mezzanine Limited Partnership

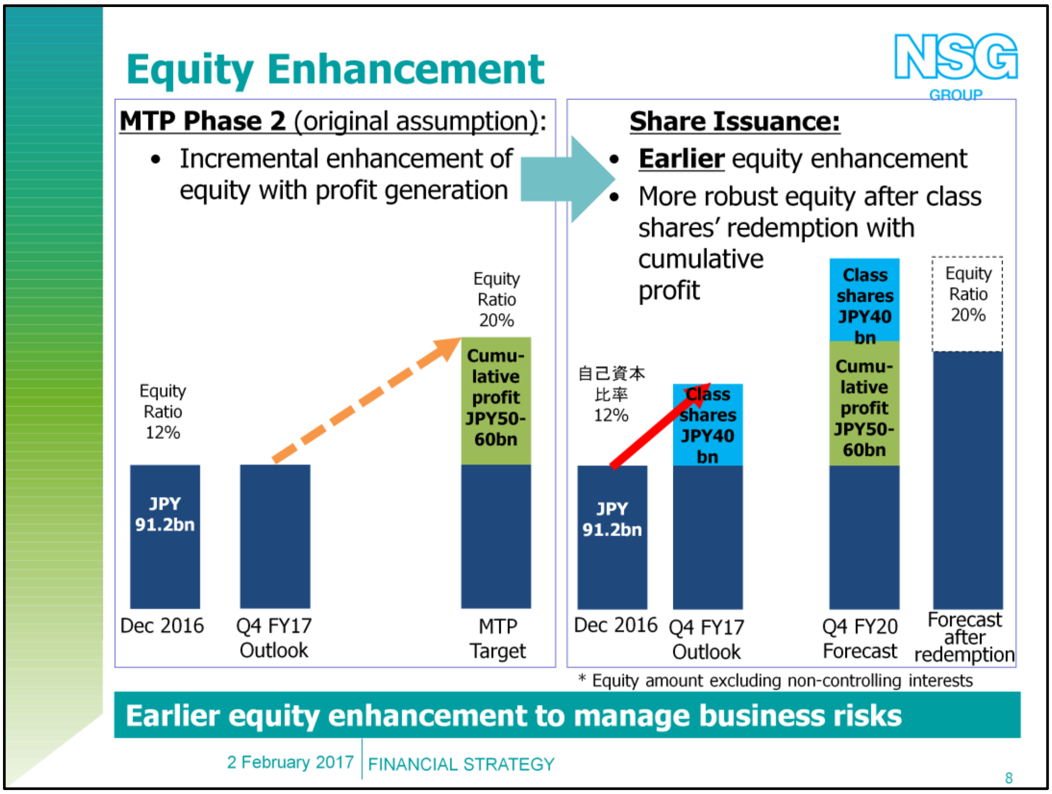
Balance sheet to begin improving at the end of FY17

* More detail on slide 18

Total amount of class shares to be issued is JPY40 billion. Class shares worth JPY 20 billion each will be allotted to Japan Industrial Solutions and USD Corporate Mezzanine Fund.

Based on the allotment agreement signed today, we will seek an approval at the extraordinary meeting of shareholders 24 March for issuing the shares on 31 March.

For more detail about the class shares, please refer to the additional documents.



Now, let us discuss the enhancement of shareholders' equity, the first objective of issuing the class shares.

Our equity at the end of Q3 (31 December 2016), was JPY91.2billion and the equity ratio was about 12%.

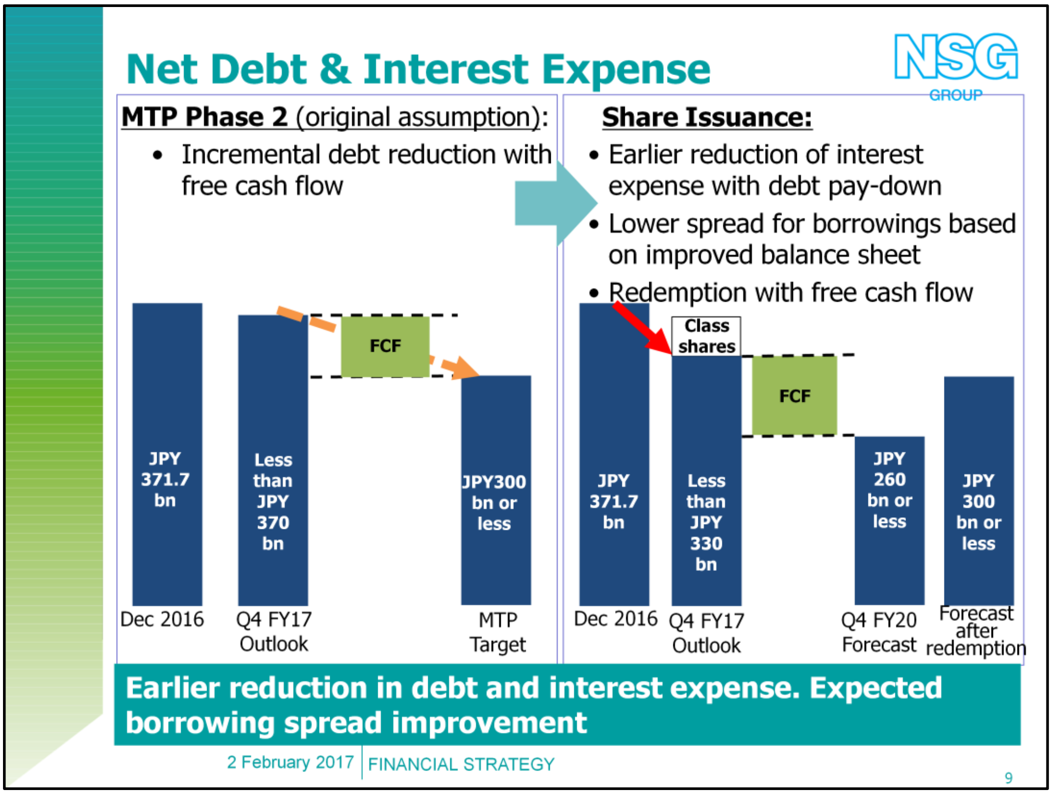
While an incremental enhancement of equity by quarterly accumulation of profits had been planned under the original MTP Phase 2, the addition of JPY 40 billion from the class shares during this fiscal year would enable the earlier improvement of equity.

If the e equity ratio were to stay at the same level as in the end of Q3, the equity ratio could go up to nearly 20% which is the final target in MTP Phase 2.

In addition, we will accumulate profits every quarter during the Phase 2 period until March 2020 to redeem the class shares with cash.

Under the continuously unpredictable and volatile economic environment, it is critical for the company to enhance balance sheet and become more prepared for potential business risks.

With the class shares, the company's equity can be enhanced early well before the end of MTP period.



In addition to the enhancement of equity, reduction interest expense and net debt, which was JPY371.7 billion at the end of Q3 (31 December 2016), are critical factors for stabilization of our finance.

While the reduction of net debt to under JPY 300 billion at the end of MTP Phase 2 had been planned with quarterly accumulation of profits , the class shares will be able to expedite reduction of net debt at the end of this fiscal year.

We expect two positive effects from this.

First, by reducing the amount of debt in absolute terms earlier than the original plan, our interest expense can be reduced earlier.

Second, with the improved balance sheet would enable us to seek better terms for borrowing such as lower spread on borrowing.

The funds necessary for cash redemption of class shares will be generated by quarterly accumulation of profits and reduction of net debt.

Redemption – Delivery of Phase 2

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- Objectives
  - Achieve financial sustainability
  - Start transformation into VA Glass Company
- Financial Target (FY20)
  - ROS: 8%*
  - Net debt / EBITDA: 3x
- Key Measures of MTP Phase 2 (FY18 - FY20)
  - Drive VA No.1 Strategy
  - Establish Growth Drivers
  - Business Culture Innovation
  - Enhance Management Approach

*Profit before depreciation of non-tangible assets

No change in MTP Targets or Key Measures, aiming for cash redemption of Class A Shares with robust delivery of MTP

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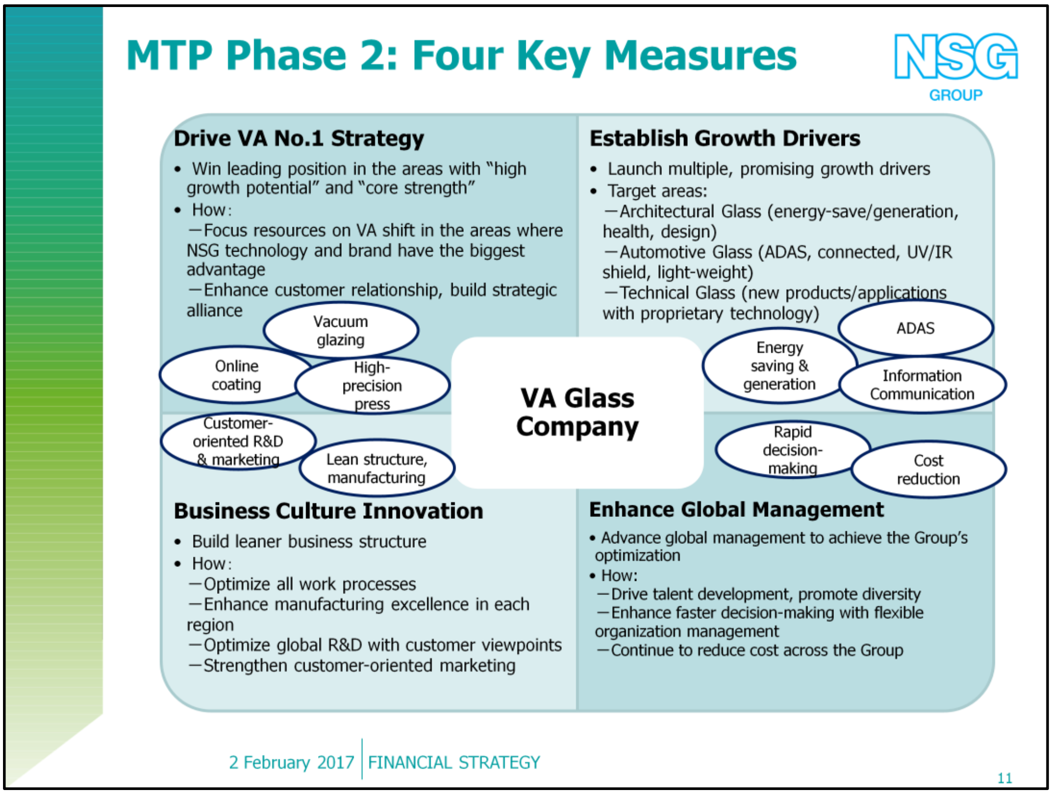
We intend to redeem the class shares by executing each of the MTP Phase 2 key measures.

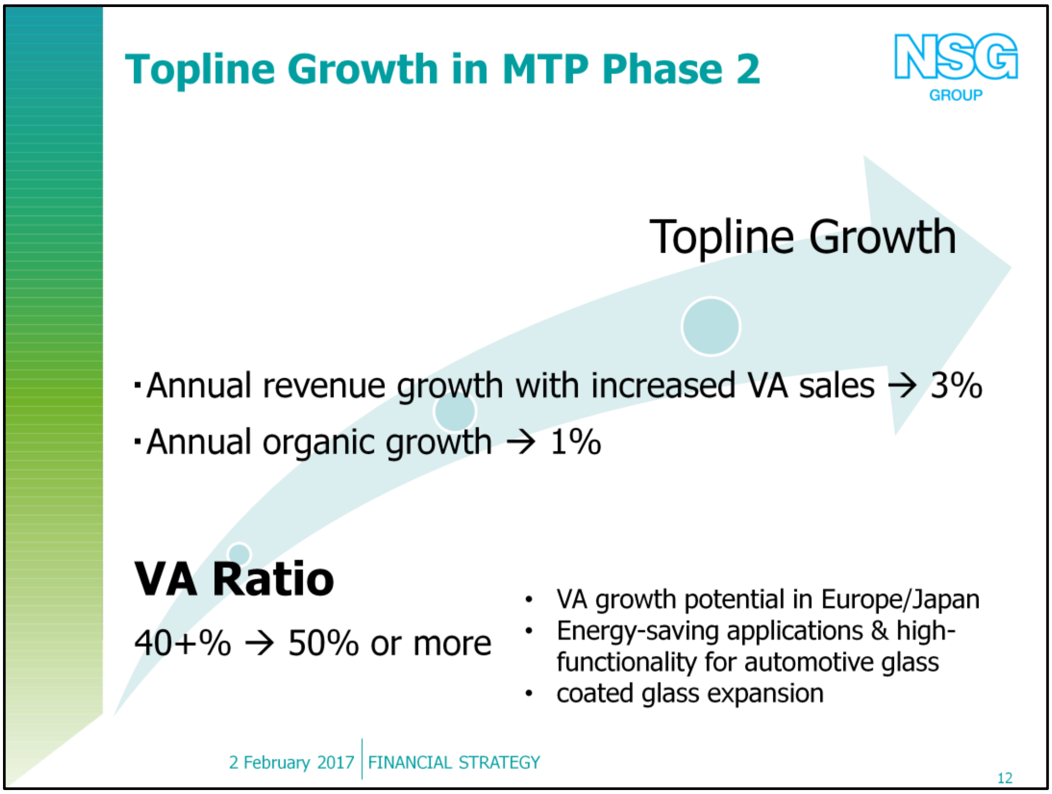
For this reason, ensuring the achievement of the original MTP targets – ROS above 8% and net debt / EBITDA ratio of 3 times – with the execution of Phase 2 key measures will be an urgent priority for the company.



As shown on this slide, we will implement MTP Phase 2 key measures, including:

- Driving VA No.1 Strategy;
- Establishing growth drivers;
- Business culture innovation; and
- Enhancing global management

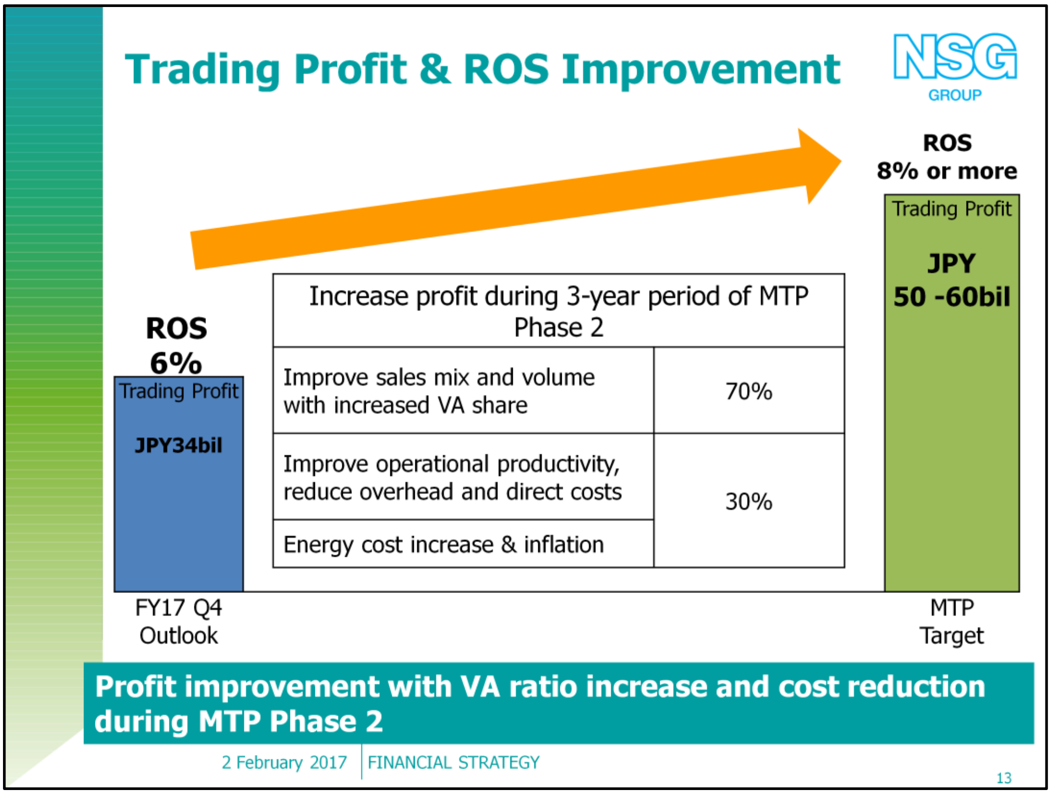
Issuing of the class shares is expected to provide a strong support for executing each of these key measures.



The plan for MTP Phase 2 includes certain topline growth through driving VA No.1 Strategy and establishing growth drivers.

As mentioned during the Q2 announcement, the ratio of high value-added (VA) products and services is already more than 40% of our sales and it is approaching the target ratio of over 50%.

While 1% organic topline growth is in our assumption, we also expect 3% growth from the VA ratio increase as there are promising opportunities in the areas of energy saving/generating , higher functionality for automotive glass and the room for increasing the VA ratio in Europe and Japan.



MTP Phase 2 profit plan targets an increase of ROS to more than 8% from 6%, the level to be expected at the end of this fiscal year.

To do so, we plan to push up the trading profit from current JPY 34 billion to JPY 50 – 60 billion.

This means a profit expansion of JPY20 billion during the next three years, or an average annual increase of about JPY 7 billion, actual rate of profit increase may vary from year to year.

We will achieve the trading profit target by increasing the ratio of VA products, improving productivity and continuing to reduce cost.

Finance Expense Reduction

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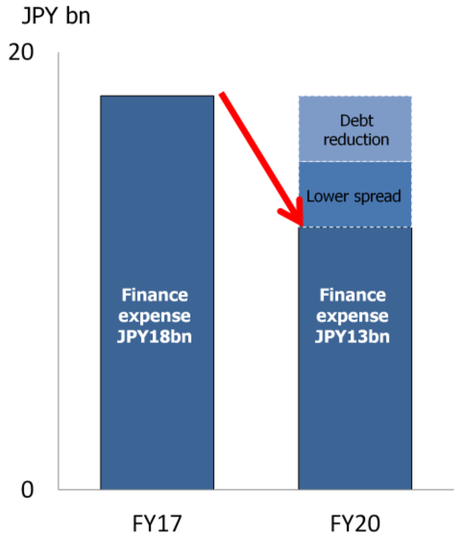
- Part of issuance proceeds to be used to pay down debt for early reduction of interest expense
- Balance sheet enhancement expected to improve borrowing terms
  - Lower spread
  - Longer borrowing term (higher stability)
  - Partial earlier refinancing in FY17 of FY18 or onward portions
- Reduction of annual interest expense by JPY5 billion by FY20, partly based on debt reduction



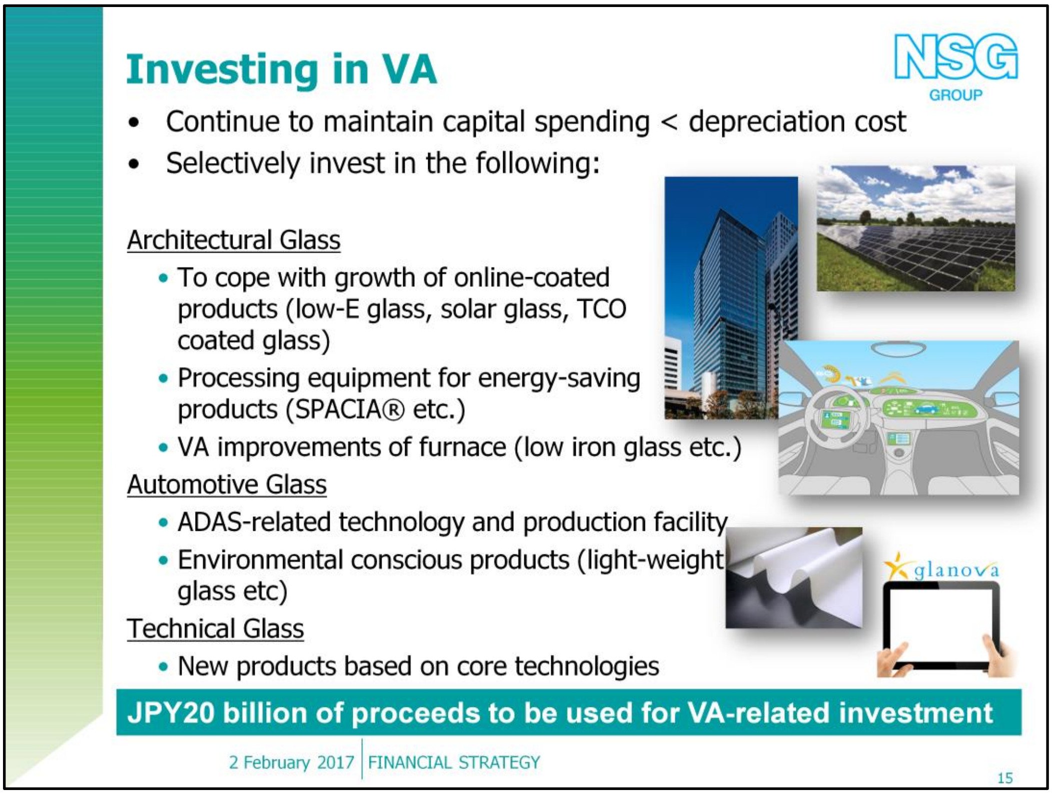
Redouble finance expense reduction efforts

To support the profit plan in MTP Phase 2 by reducing finance expense, half of the class share proceeds will be used to pay down debt.

This will help improve the balance sheet, enable us to seek better terms for borrowing and reduce interest expense.

While the better terms include those which can directly reduce cost such as lower spread but other conditions such as longer loan terms or earlier refinance are expected to be beneficial for more stabile financing situation.

Ultimately, we are aiming at reducing our interest expense by JPY5 billion.



Out of the class share proceeds of JPY 40 billion, JPY 20 billion will be invested in driving VA Shift necessary for executing key measures of MTP Phase 2.

However, there will be no change in our policy to keep the amount of capital expenditure below depreciation and investments in VA Shift will be made selectively.

As shown on this slide, our investment in Architectural, Automotive and Technical glass businesses will be guided by “VA No.1 Strategy” which will focus on the areas of our “core strength” and “promising growth opportunities.”

Summary

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- To issue JPY40 billion Class A Shares, subject to resolution at the extraordinary shareholders' meeting
- To aim for earlier financial stability and profit improvement with expedited debt reduction and equity enhancement
- To secure fund for VA related investment at the same time.
- To redeem Class A Shares with cash to be generated by executing the key measures under MTP Phase 2

As discussed, NSG Group will pursue early stabilization of finance, profitability improvement and securing of investment funds for increasing high value-added products by issuing the class shares.

We will also aim for cash redemption of the class shares by ensuring the execution of MTP Phase 2 key measures.

Thank you.

Appendix

Class A Shares Detail

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<table>
<tr><td>Amount
(No of Shares)</td><td colspan="5">JPY40 billion (40,000 shares)</td></tr>
<tr><td>Planned Allottees
(Amount &
No of shares)</td><td colspan="5">Japan Industrial Solutions Fund II — JPY20 billion (20,000 shares)
UDS III Corporate Mezzanine Limited Partnership — JPY10 billion (9,000 shares)
UDS IV Corporate Mezzanine Limited Partnership — JPY10 billion (11,000 shares)</td></tr>
<tr><td>Voting Rights</td><td colspan="5">None</td></tr>
<tr><td>Preferred dividend rate
(Cumulative)</td><td colspan="5">31 March 2017 ~ 31 March 2018 — 4.5%
1 April 2018 ~ 31 March 2020 — 5.5%
1 April 2020 ~ — 6.5%</td></tr>
<tr><td rowspan="3">Call option
(Company's option)</td><td>Consi-deration</td><td>Cash</td><td rowspan="3">Put option
(Planned Allottees' option)</td><td>Consi-deration</td><td>Ordinary Shares</td></tr>
<tr><td>Redemp-tion</td><td>1 April 2018 or later</td><td>Redemp-tion</td><td>1 July 2020 or later, unless conversion restriction removal reason exists</td></tr>
<tr><td>Redemp-tion Amount per share</td><td>Paying-in amount per share + cumulative accrued dividend amount + daily prorated accrued preferred dividend amount + redemption premium
<Redemption premium>
1 April 2018 ~ 30 June 2018 : 1.08
1 July 2018 ~ 30 June 2019 : 1.15
1 July 2019 ~ 30 June 2020 : 1.22
1 July 2020 ~ 30 June 2021 : 1.29
1 July 2021 ~ 30 June 2022 : 1.36
1 July 2022 ~ : 1.43</td><td>No. of Ordinary Shares to be Issued per Class A Share</td><td>(Paying-in amount per share X ordinary share redemption premium) + acquisition price
<Ordinary share redemption premium>
1 April 2017 ~ 30 June 2017 : 1.05
1 July 2017 ~ 30 June 2018 : 1.08
1 July 2018 ~ 30 June 2019 : 1.15
1 July 2019 ~ 30 June 2020 : 1.22
1 July 2020 ~ 30 June 2021 : 1.29
1 July 2021 ~ 30 June 2022 : 1.36
1 July 2022 ~ : 1.43</td></tr>
<tr><td>Design</td><td colspan="5">• In principle, the Planned Allottees may not exercise their put option before 1 July 2020.
• The Planned Allottees may exercise their put option for 4,000 or less Class A Shares, when the Company notifies the exercise of its call option for the entire outstanding Class A Shares.</td></tr>
</table>

Reference: VA related investment
Online Coated Products

Market	Application	Function / usage	Our product
Architectural	Eco glass IGU	Low-E coat	**Energy Advantage™**
Architectural	Windows, showcase	Anti-reflection view	**OptiView™**
Architectural	Windows	Reflective coat	**Reflite™**
Solar	PV panel	Conductive & anti-reflection	**NSG TEC™**
White goods	Refrigerator	Conductive layer	**NSG TEC™**
Digital signage	Touch panel	Conductive layer	**NSG TEC™**
Interior	Cover on display	Half mirror	**MirroView™**
Switchable	Electro chromic	Conductive layer	**NSG TEC™**
Automotive	Car glazing	Low-E / energy saving	(now in R&D)
Automotive	Car glazing	All-surface heating	(now in R&D)

Expanding to non-architectural market applications

Reference: VA related investment
ADAS-related & Environment Conscious Products

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ADAS / Sensors
- WS with camera sensor

Head-up display
- 3 dimensional contour control = APBL

Driving safety
- Anti-fog coating
- Hydrophobic coating

Electricity
- Power design
- AGM battery
- LIB separator

Roof advanced
- Switchable
- PV panel
- Heat insulation, heat block

Connectivity
- Glass printed antenna (next gen ITS mode)

Sophisticated design
- Complex glass shaping
- Glass flake products

Energy saving Heat insulation
- Low-e glass

Rubber-made belt for engine & power steering unit
- Glass cord

Body light weighting
- PPS compound with glass flake
- Thin glass

Driving comfort
- Acoustic glass
- Heat block glass

Human health, skin care
- UV & IR cut coated glass

Note) Red: Automotive glazing
Blue: Non-window products

Notice

The projections contained in this document are based on information currently available to us and certain assumptions that we consider to be reasonable. Hence the actual results may differ. The major factors that may affect the results are the economic environment in major markets (such as Europe, Japan, the U.S. and Asia), product supply/demand shifts, and currency exchange fluctuations.

Nippon Sheet Glass Co., Ltd.