

# New Mid-Term Plan: CCP300 (FY2006-FY2008)

November 24, 2004

Nippon Sheet Glass Co., Ltd.

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- Summary of Strategy by Business Area

# Review of ACT21 (FY02-FY05)

**FY2005**



**Recovered to  
make profits**

- **Implementation of the Second Stage of ACT21**

**FY2004**

**FY2003**



**Plunged into the  
red after collapse  
of IT bubble**

- **Setting guidelines for ACT21**
  - **Re-start from zero (Information/Electronics)**
  - **Restructuring of unprofitable business**
  - **Selection and concentration**

**FY2002**

- **Revision of ACT21**

**FY2001**

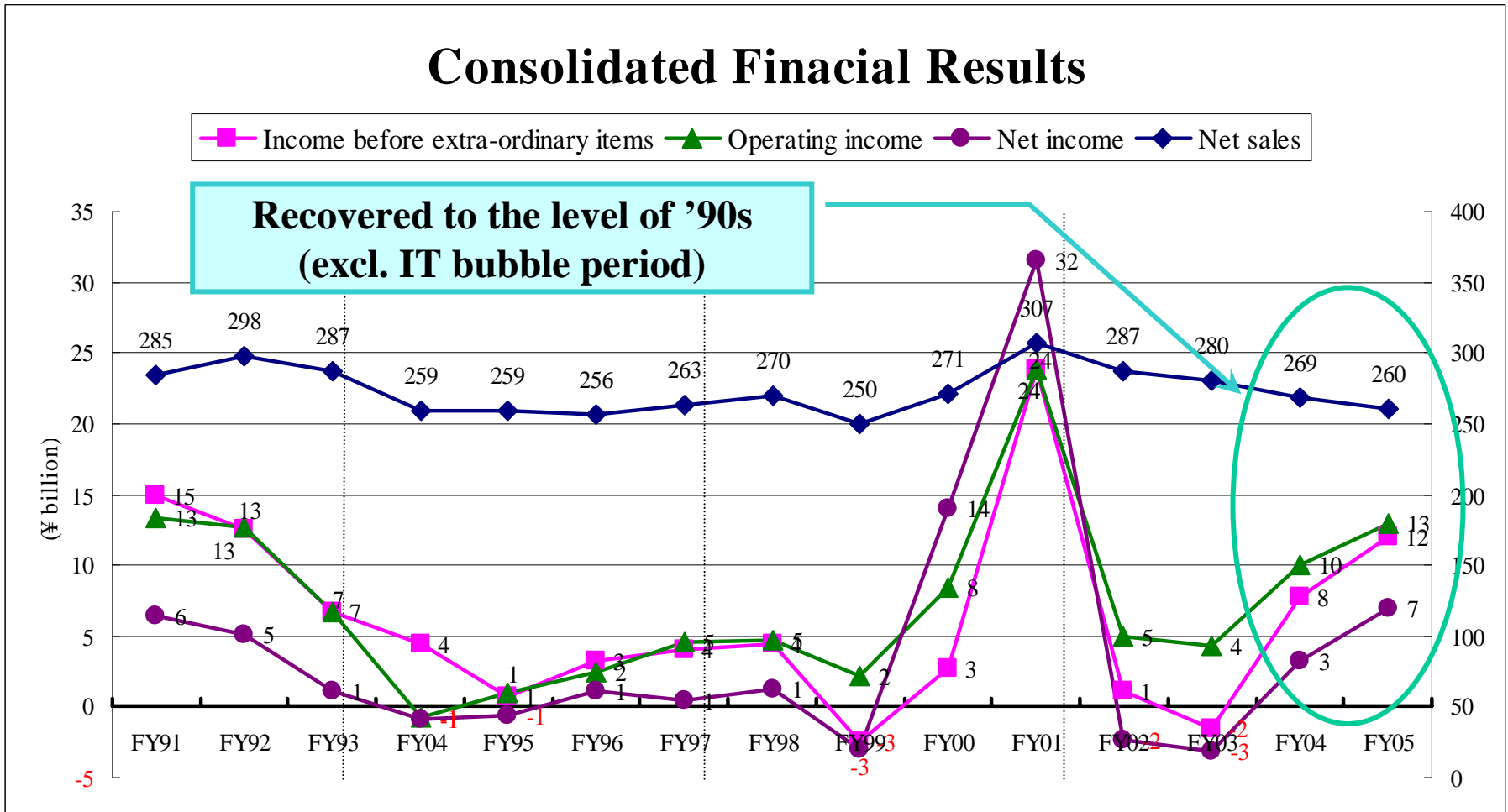


**Recorded highest  
profit in history**

- **Launch of New Vision (10 year plan to 2010) and ACT2 (mid-term plan from FY02 to FY05)**

# Review of ACT21 (FY02-FY05)

## Consolidated Financial Results



# Review of ACT21 (FY02-FY05)



- 1. Generate stable revenue from well-developed businesses**
- 2. Expand businesses with potential for growth**
- 3. Withdraw from unprofitable businesses**
- 4. Focus resources on core businesses**
- 5. Augment R&D and create new businesses**
- 6. Reassess overseas businesses**
- 7. Reinforce management fundamentals**
- 8. Use assets effectively**
- 9. Promote corporate governance**
- 10. Create new corporate culture**

# Review of ACT21 (FY02-FY05)

## Growth

- LCD Glass
- Printer Lenses
- Metashine

## Groundwork for Growth

- Southeast Asia Business
- Automotive Business in China
  - PDP Glass
- SLED Joint Development

## Exit from unprofitable businesses

- Continuous Glass Fiber
- Glass Disk
- Tianjin NSG Float Glass

## Earning Improvement, Selection & Concentration, Focus on Core Businesses

- \* Optical Telecommunication: restructuring & reduction in fixed costs
- \* Building Glass: shutdown of unprofitable facilities & rationalization of production
- \* Automotive Glass: closedown of Aichi plant & drastic cost reduction
- \* Sale of shares in Isolite, Pelnox, etc.

# Outline of CCP300

## **New Mid-Term Plan: CCP300 (FY2006-FY2008)**



# Outline of CCP300

## What does **CCP300** stand for?

New principles of conduct:

**C**hallenge, **C**ourage, **P**assion

Sales target: **¥300** billion

## *New Vision*

- To survive as winner - **Goals in FY2011**

**Sales: ¥500 billion**

**Pre-tax Profit: ¥50 bill**

**ROA & ROE >10%**

**FY2009 - FY2011**

**FY2006 - FY2008**  
**“CCP300”**

**FY2002- FY2005**  
**ACT 21**

**First Stage**  
**FY2002 - FY2003**

**Second Stage**  
**FY2004 - FY2005**

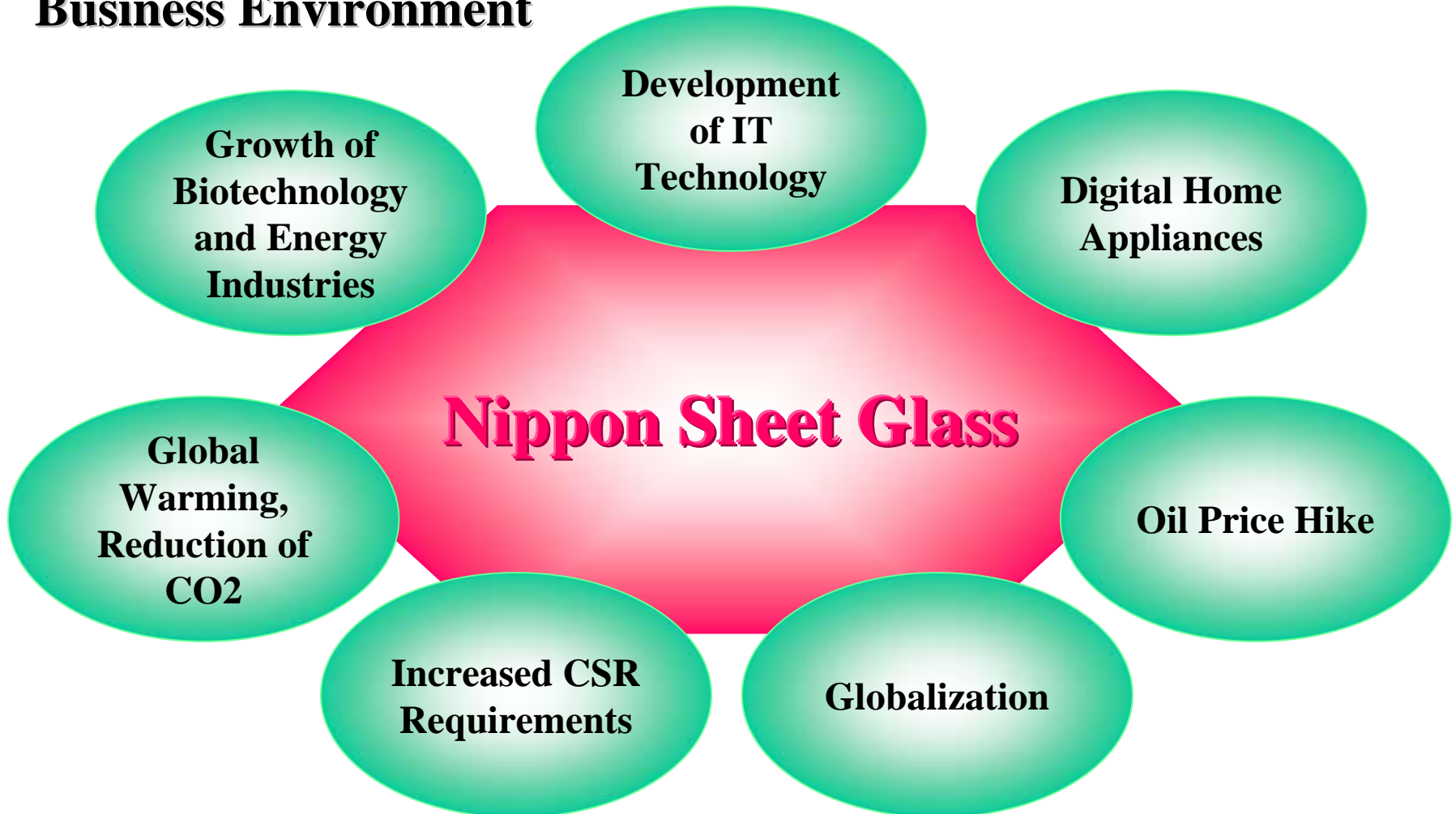
## Position of CCP300 in New Vision

- A milestone toward the attainment of the targets of “New Vision”  
Growth and expansion after the phase of restructuring



# Outline of CCP300

## Business Environment



# Outline of CCP300

## Target Direction

- *New Vision*
  - Advanced and globally-recognized corporation
  - Improvement of corporate value as a group  
(for all the stakeholders including shareholders, customers, communities and employees)
  
- *CCP300*
  - Reinforcement of existing businesses
  - Further development of new technologies, new products and new business fields

# Outline of CCP300

## Groundwork for CCP300

### Strength in manufacturing; with focus on frontline operations

- 1. Excellence in craftsmanship and quality
- 2. Insatiable challenge toward technical superiority
- In short term, intensive allocation of management resources to manufacturing operations
- In longer term, emphasis on competitive engineers, basic R&D and succession of manufacturing skills

### New Principles of Conduct

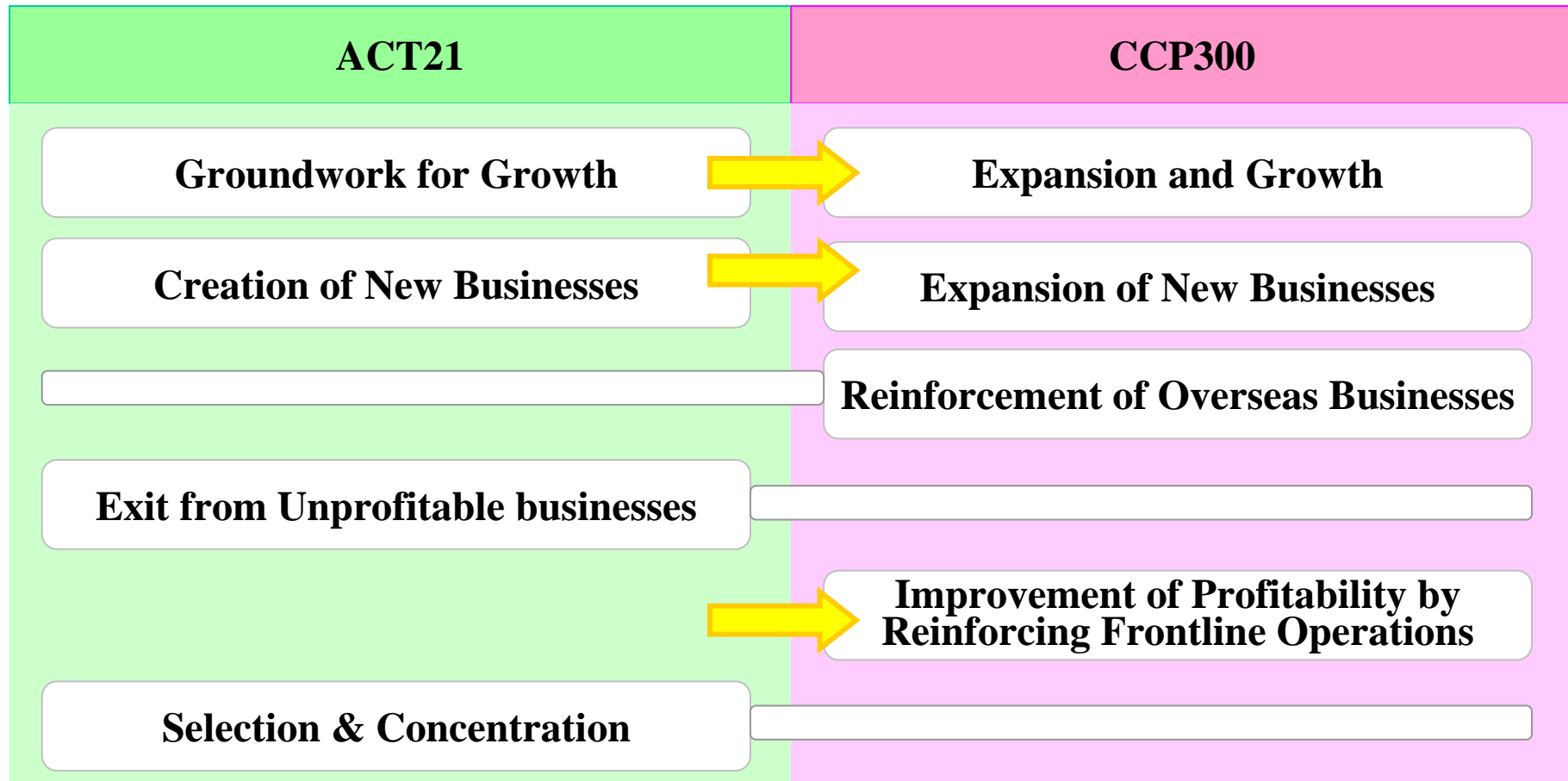
**Challenge, Courage, Passion**



**CCP300**

# Outline of CCP300

## Shift in Priority



# Outline of CCP300

## Basic Strategy

**Generate Stable Income through  
Cost Reduction and Efficiency  
Improvement**

**Flat Glass Business  
(Building and Automotive Glass)**

**Realize High Profitability and  
Efficiency by Allocating  
Resources to Growth Areas**

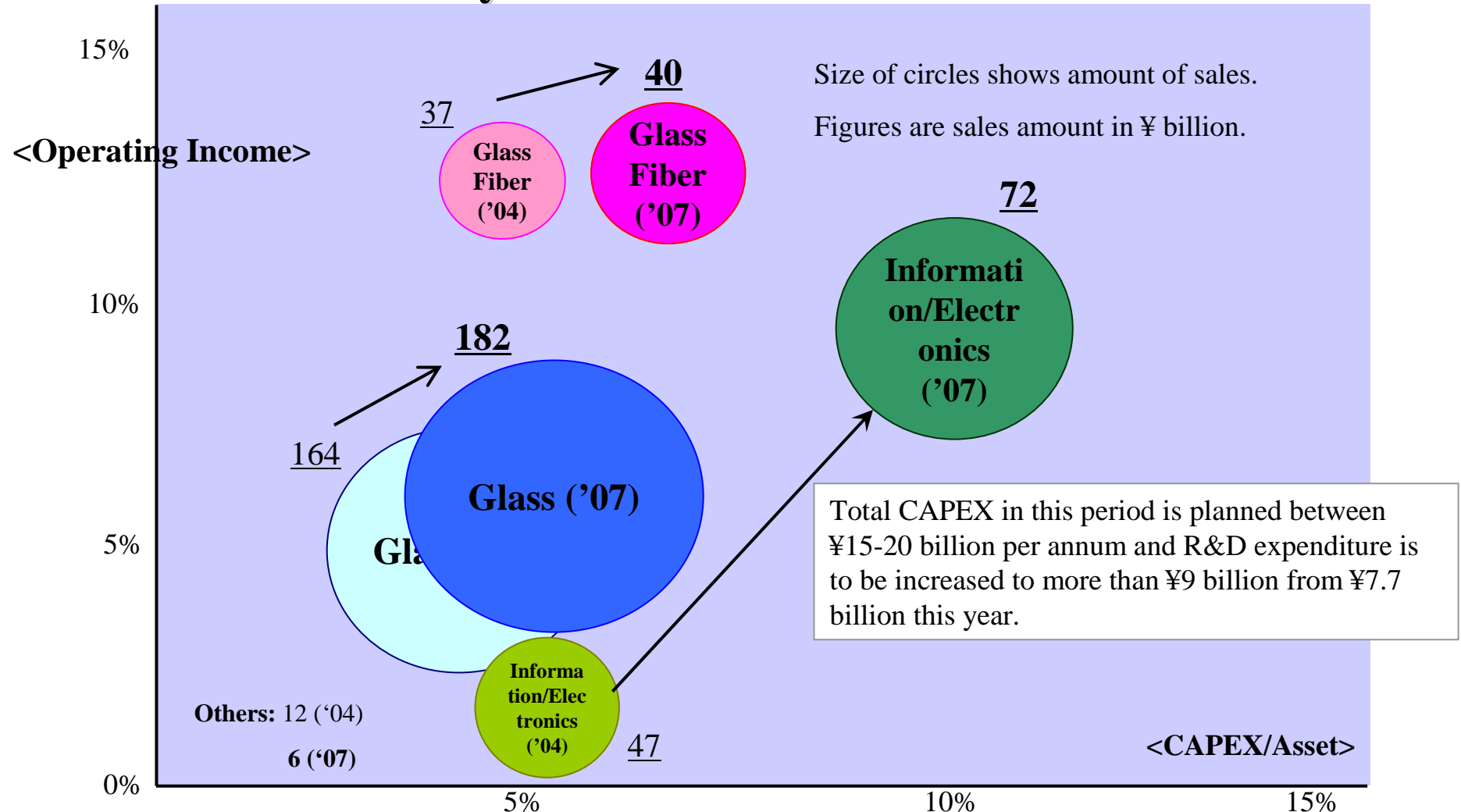
**New Business**

**Information/Electronics Business**

**Glass Fiber Business**

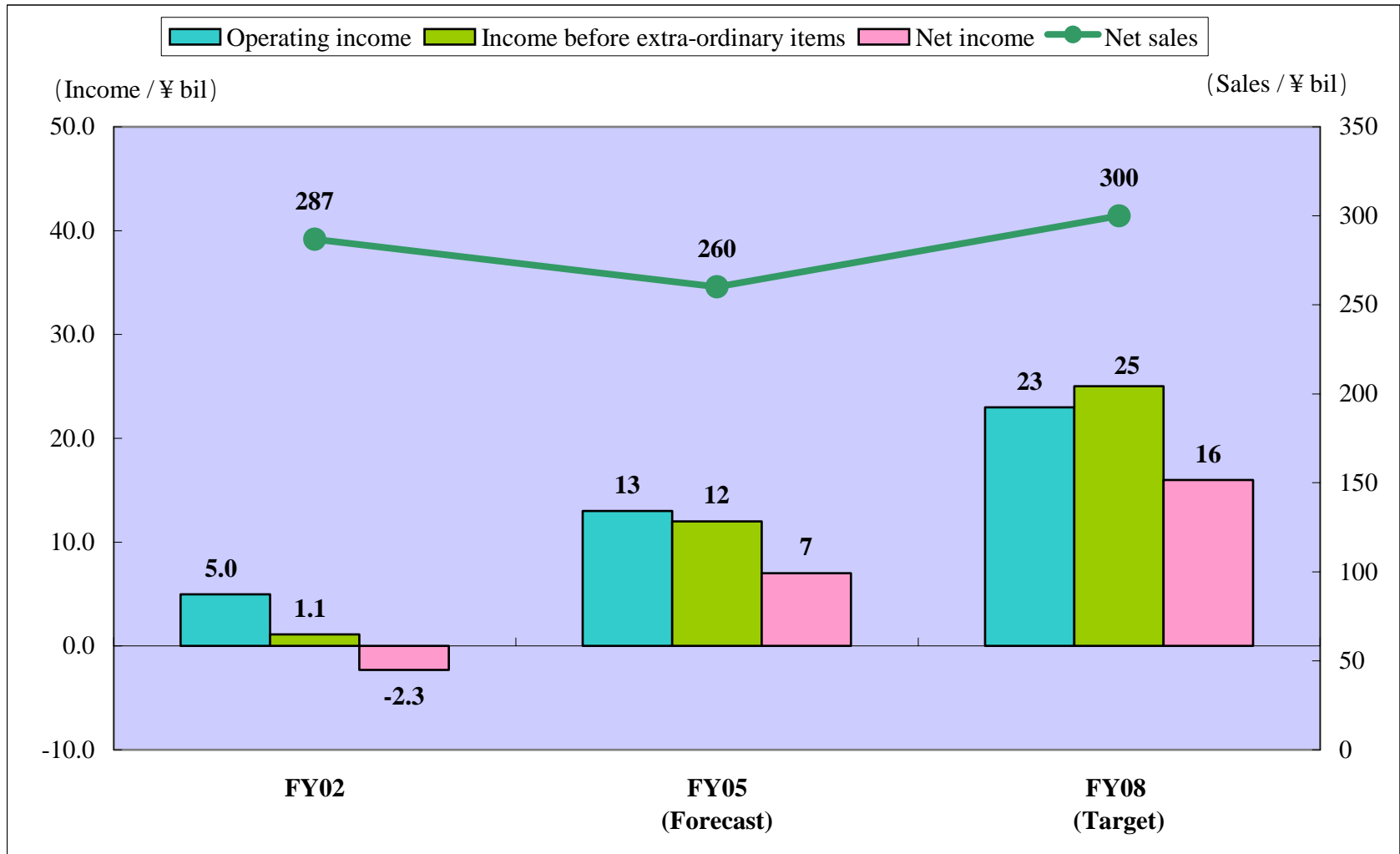
# Outline of CCP300

## Business Portfolio by Area



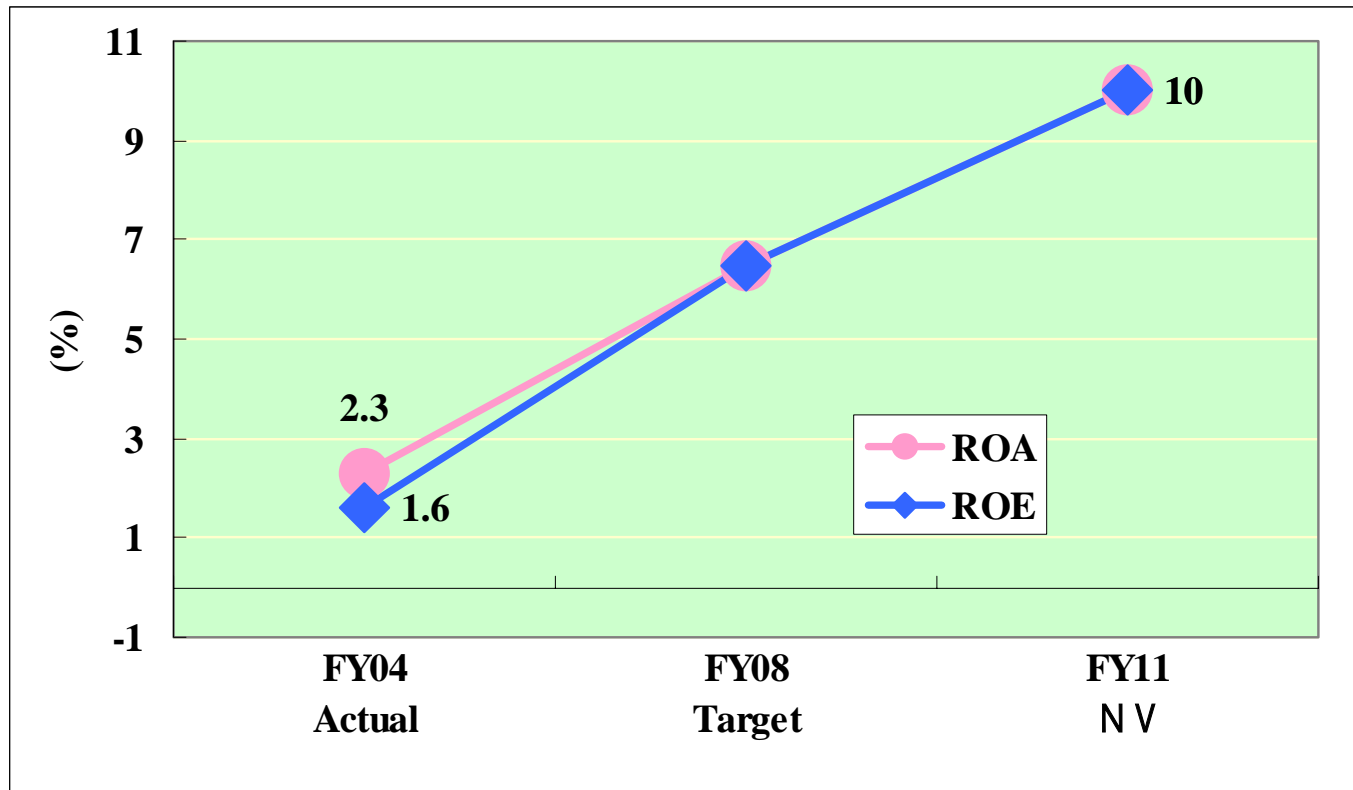
# Outline of CCP300

## Target Sales and Income



# Outline of CCP300

## Improvement in ROA and ROE



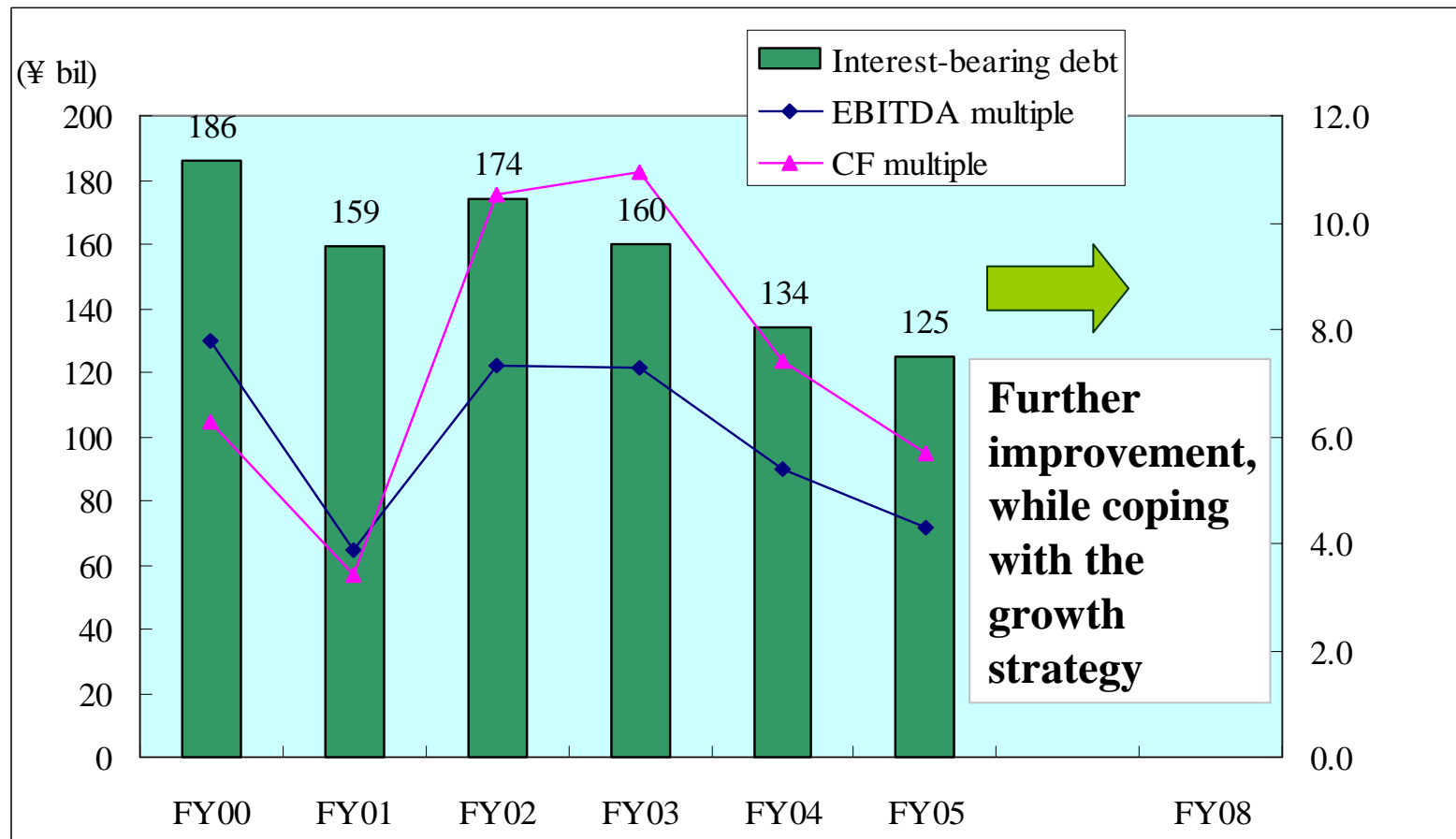
In order to achieve 10% targeted in New Vision, CCP300 aims at 6-7%.

- Definition of ROA:  $(\text{Income before extra-ordinary items} + \text{Interest}) / \text{Total Asset}$
- Definition of ROE:  $\text{Net income} / \text{Shareholders' equity}$



# Outline of CCP300

## Interest-bearing Debt



- EBITDA: Operating income + Depreciation & Amortization
- CF: Net income + Depreciation & Amortization

# Summary of Strategy by Business Area

Nippon Sheet Glass Co., Ltd.

# Flat Glass Business



**Architectural glass  
(glass and materials  
for architectural use)**



**Automotive glass  
(transportation vehicle  
glass)**



# Flat Glass - Summary of Strategy



## <Architectural Glass>

- Japan:
  - Becoming the leading functional glass supplier
    - Expansion in growth areas such as heat-insulation and burglary prevention glass
- Asia:
  - Maintaining top market shares in Vietnam and Malaysia
  - Maximizing group synergy in the region including Japan

## <Automotive Glass>

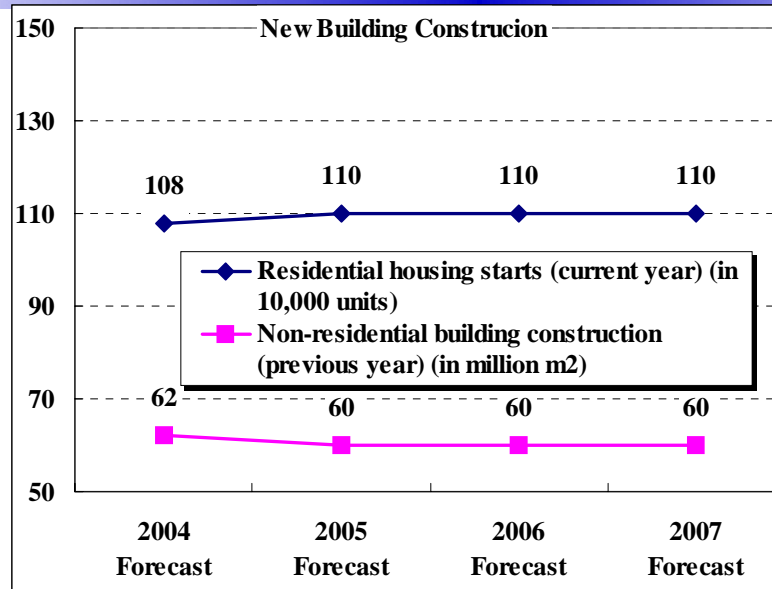
- Expansion of high added-value products and cost reduction by “production system innovation”
- Maximization of synergy with Pilkington

# Flat Glass - Architectural Glass

## Business Environment

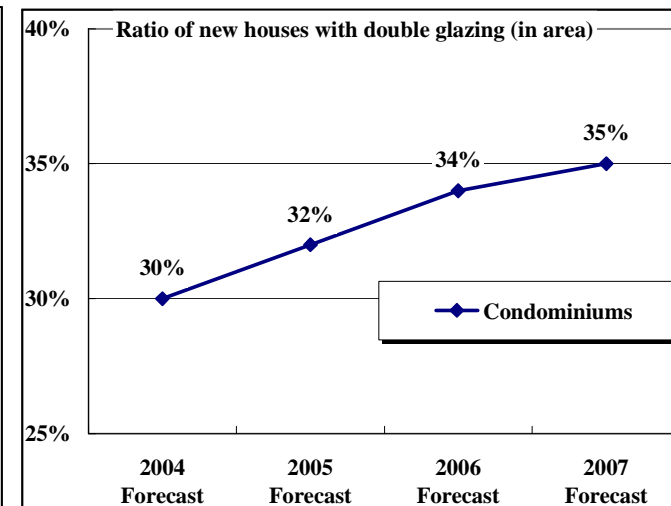
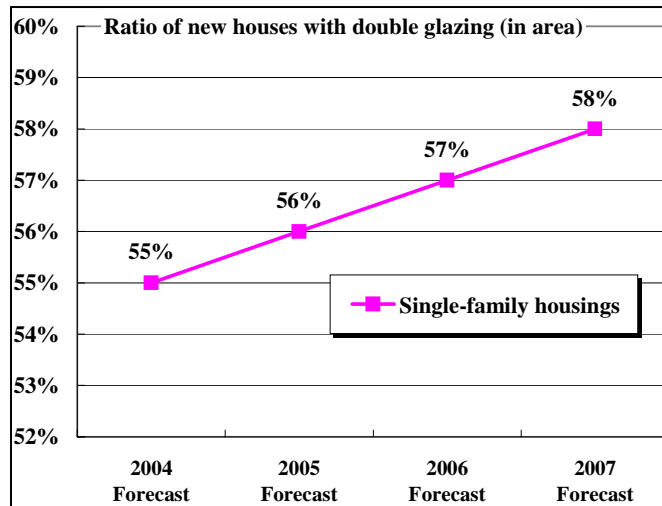
### New building construction market in Japan:

forecasted to stay flat in medium term



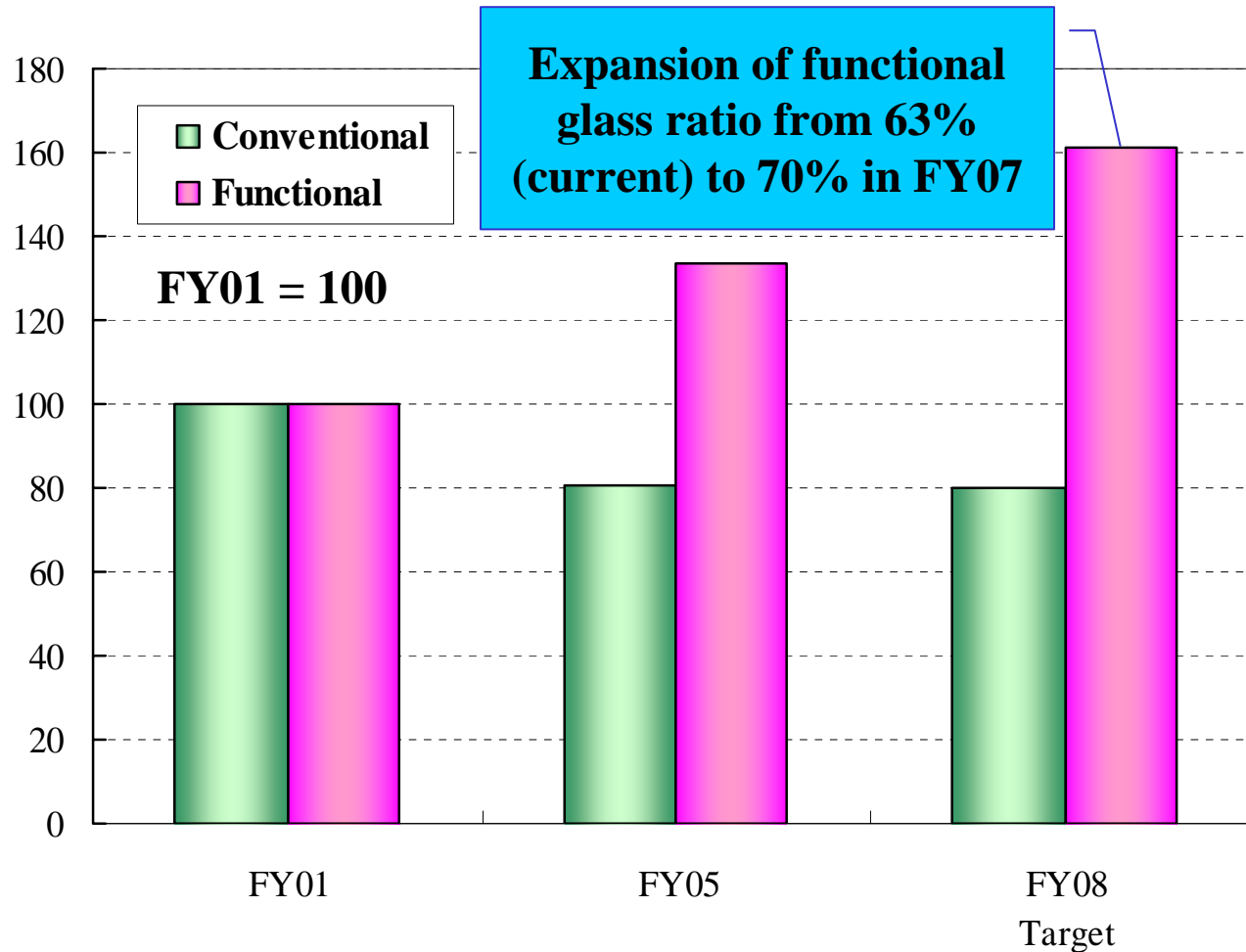
### Demand for double glazing in Japan:

forecasted to be strong for both single family housings and condominiums



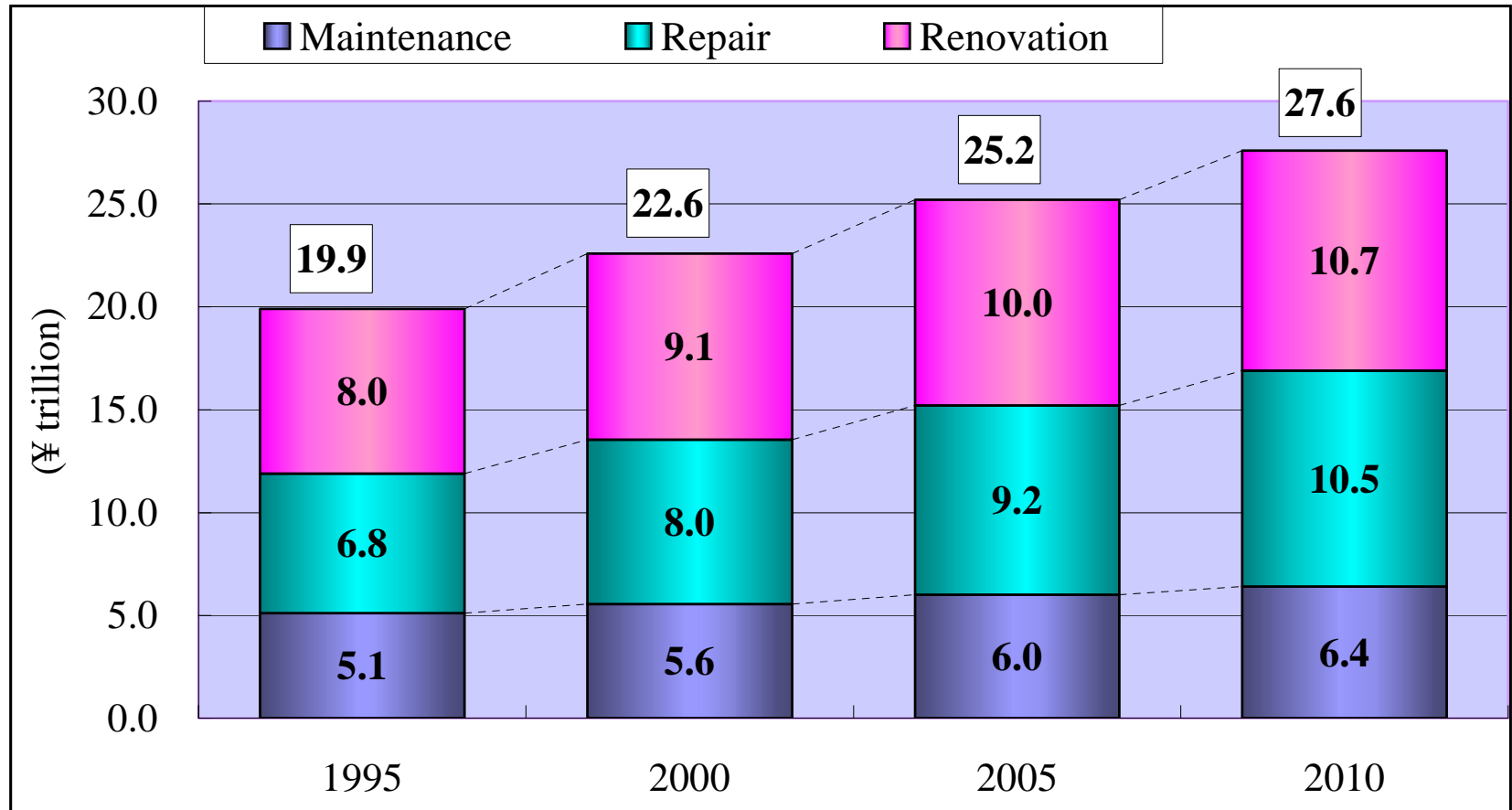
# Flat Glass - Architectural Glass

## Architectural glass sales value in Japan by product type



# Flat Glass - Architectural Glass

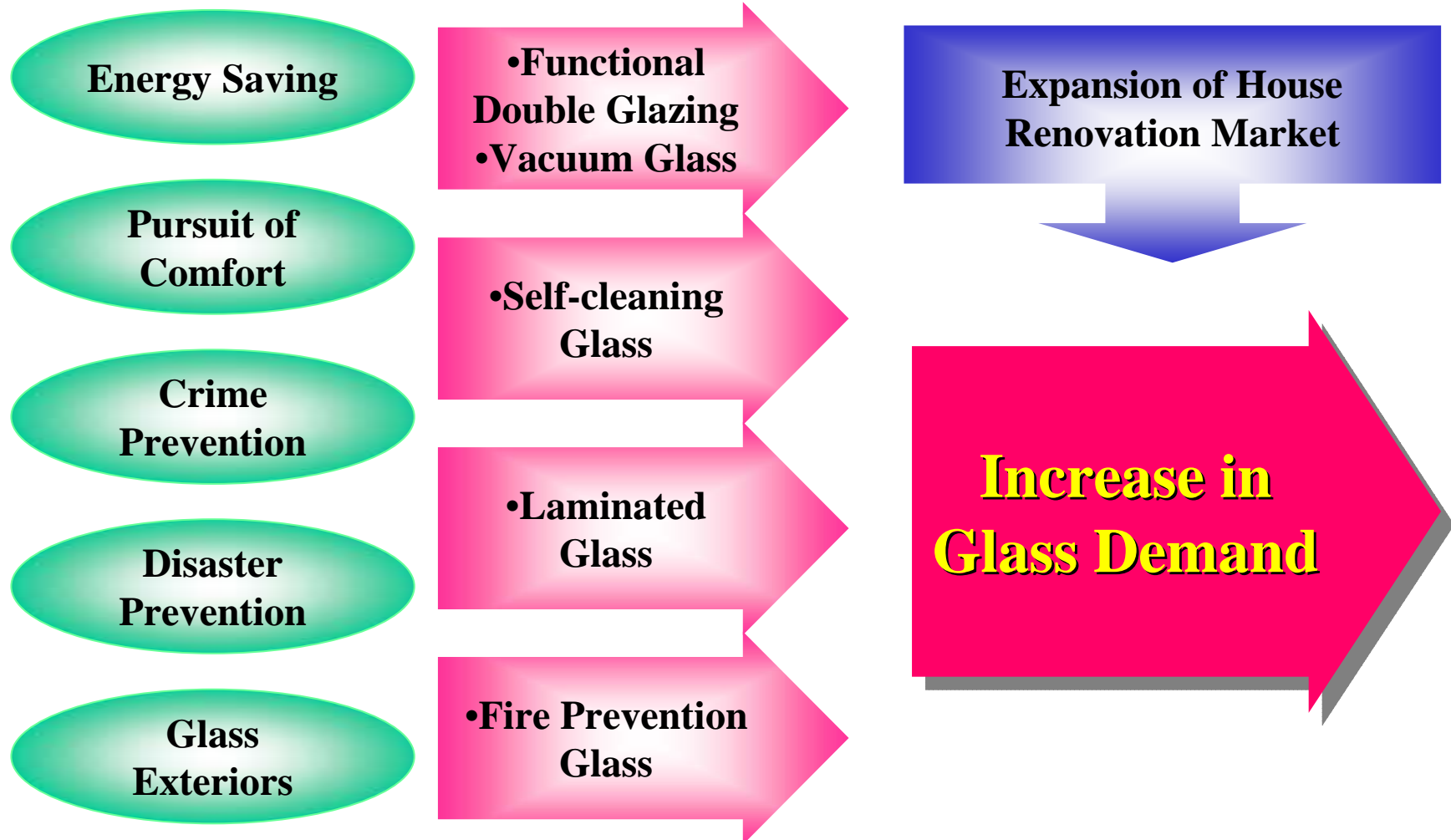
## Business Environment - House Renovation Market in Japan



(Ministry of Land, Infrastructure and Transport, Japan)

# Flat Glass - Architectural Glass

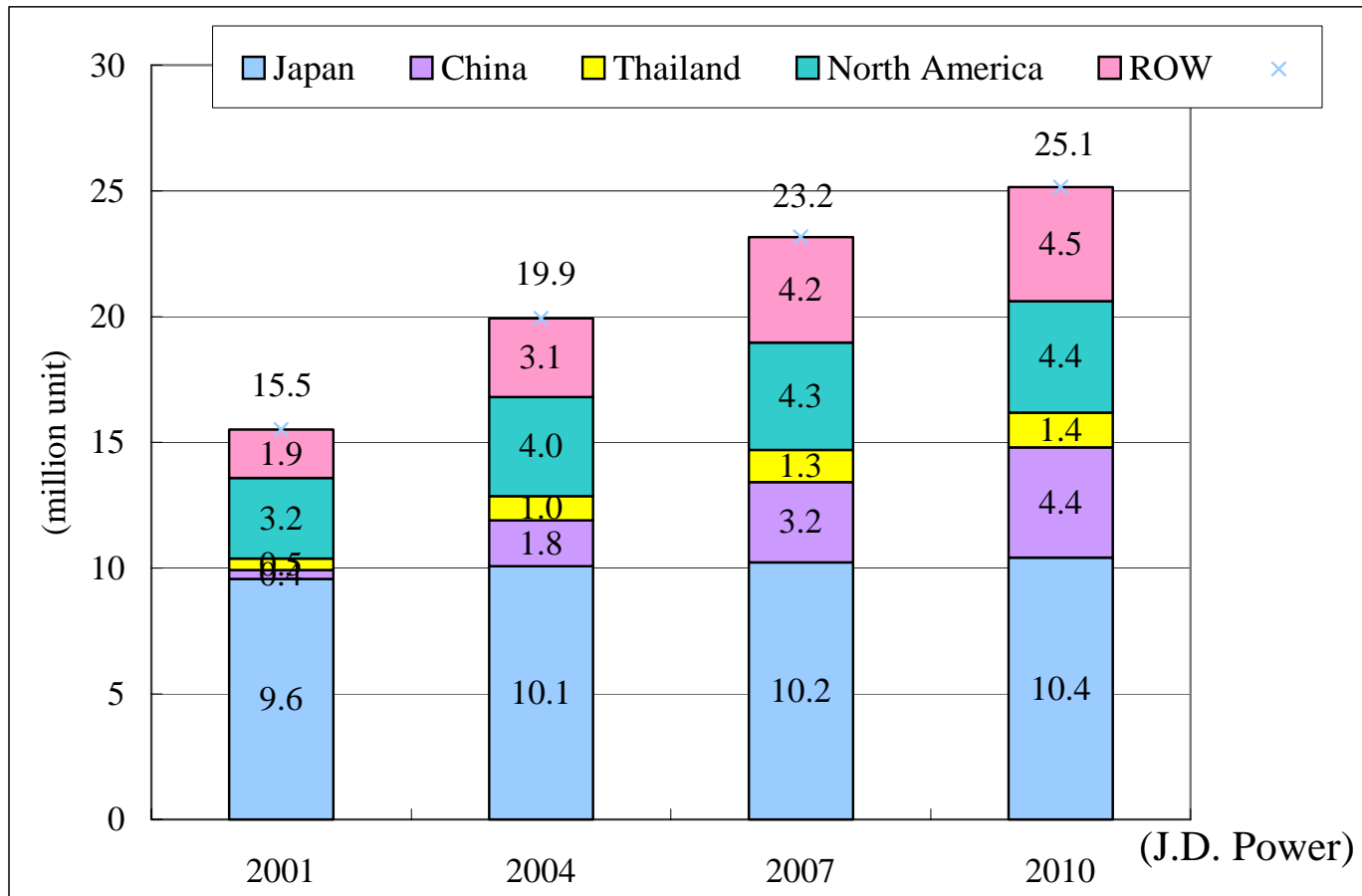
## Social Requirements for Architectural Glass



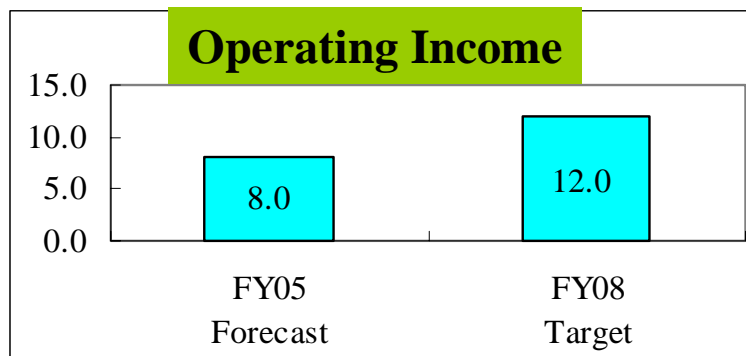
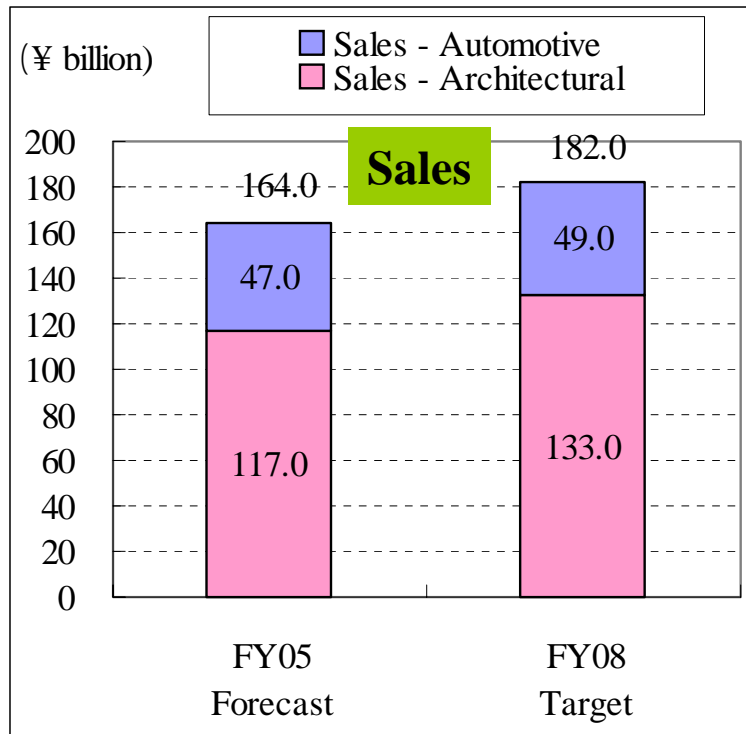


# Flat Glass - Automotive Glass

## Business Environment - Global Production Forecast of Japanese Nameplate (JNP) Vehicles



# Flat Glass - Expansion during CCP300



## <Architectural Glass>

- Japan
  - Growth in functional glass; shift to multi-functional glass
- Abroad
  - Capacity increase in Asia for local markets
    - Re-start of a furnace in Malaysia in 2005
    - Start-up of a new furnace in Vietnam in 2007

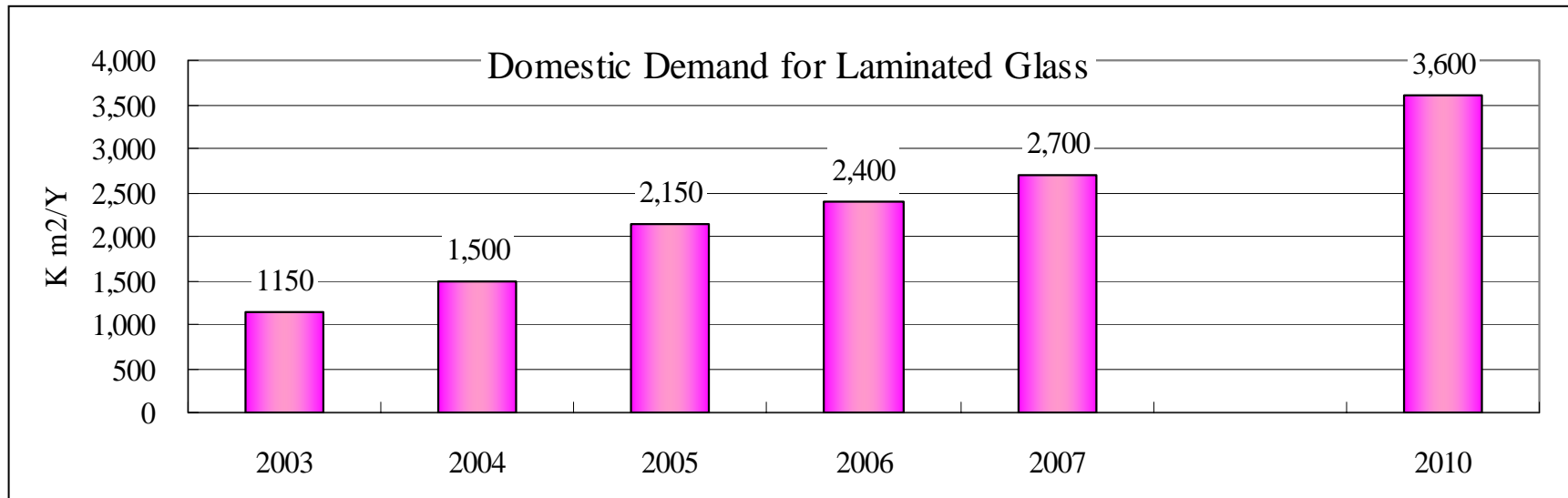
## <Automotive Glass>

- Improvement in productivity by replacing old facilities and equipment
- Penetration into Chinese market
  - (Numerical target is not included.)

# Flat Glass - Topics

## <Capacity Increase for Architectural Laminated Glass>

- Timing: first half of FY06
- Total investment: ¥1.3 billion
- Added capacity: 700 K m<sup>2</sup>/year
- Total capacity after expansion: 1,400 K m<sup>2</sup>/year



## Information / Telecommunications Devices

SLA, SLED, chemically enhanced glass,  
components for office equipment such as  
printers, scanners and copiers, SELFOC micro  
lenses, telecommunication devices



## Display Glass

LCD substrates, PDP substrates



# Information/Electronics - Summary of Strategy



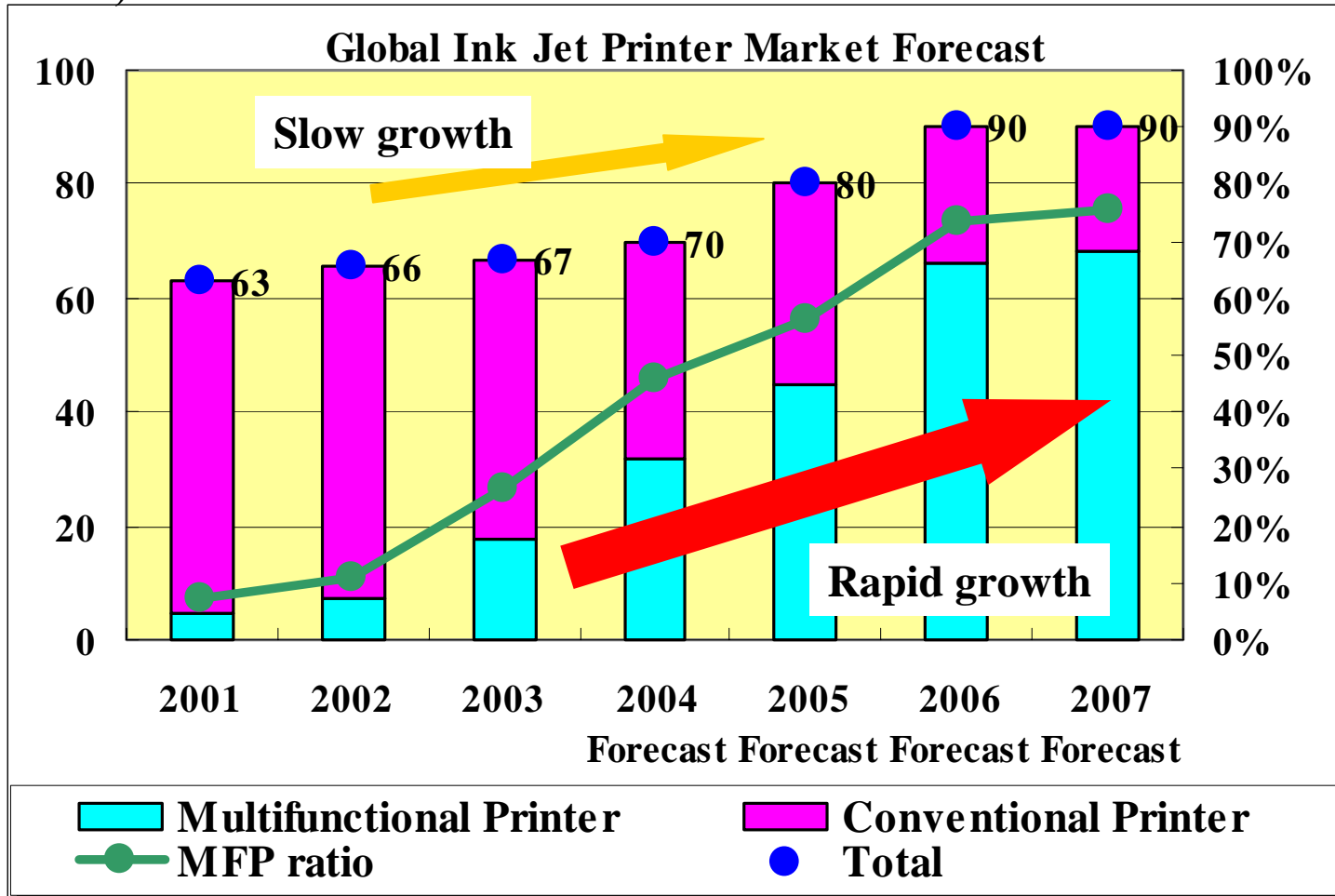
## <Information / Telecommunications Devices>

- Information Devices
  - Establishment of leading position in lenses and light sources for home and office equipment such as printers, copiers and scanners
- Telecommunication Devices
  - Becoming key player in component markets, making best use of SELFOC's advantages
  - (As short-term goal, turning business into the black)

# Information/Electronics - Information / Telecommunications Devices

## Business Environment

(million units)



# Information/Electronics - Topics



## <Increase of SLA Production>

- Timing: Spring 2005
- Volume: from 3 million to 5 million units/month
- Total investment: ¥1.5 billion
  - Hot process (glass melting process):
    - Addition of melting capacity for 2 million units/month at Yokkaichi plant
  - Cold process (fabrication process):
    - Capacity expansion for 1 million units/month in China
    - (Further investment will be made in line with actual market growth)

# Information/Electronics - Summary of Strategy



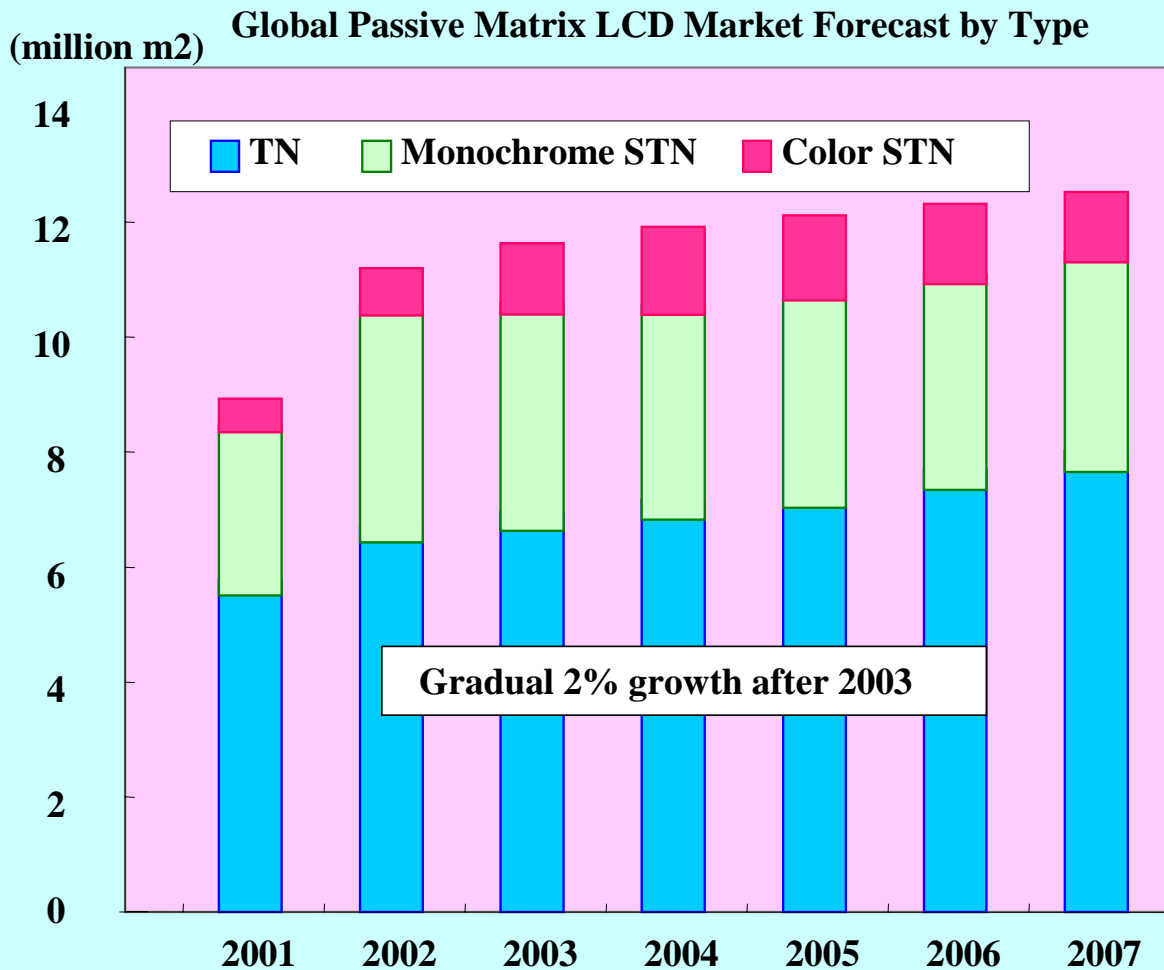
## <Display Glass>

- Penetration into PDP substrate glass market
- Expansion of TFT substrate glass production
- Expansion of active display related businesses
- Increase in volume and market share of UFF (ultra fine flat glass)
  - Growth in STN substrates based on increase in mobile phone usage in BRICS area
  - Introduction of new applications such as e-book



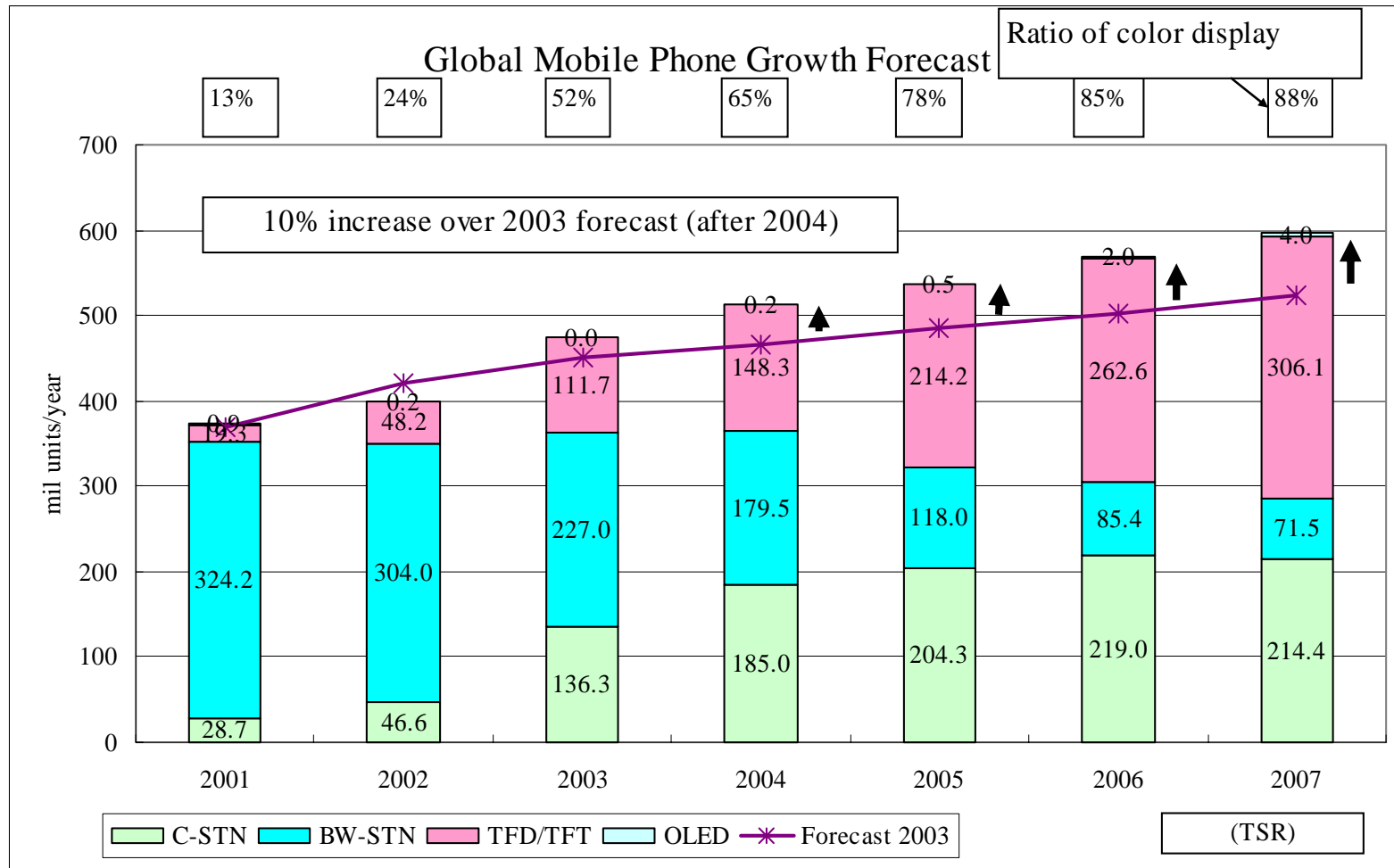
# Information/Electronics - Display Glass

## Business Environment



# Information/Electronics - Display Glass

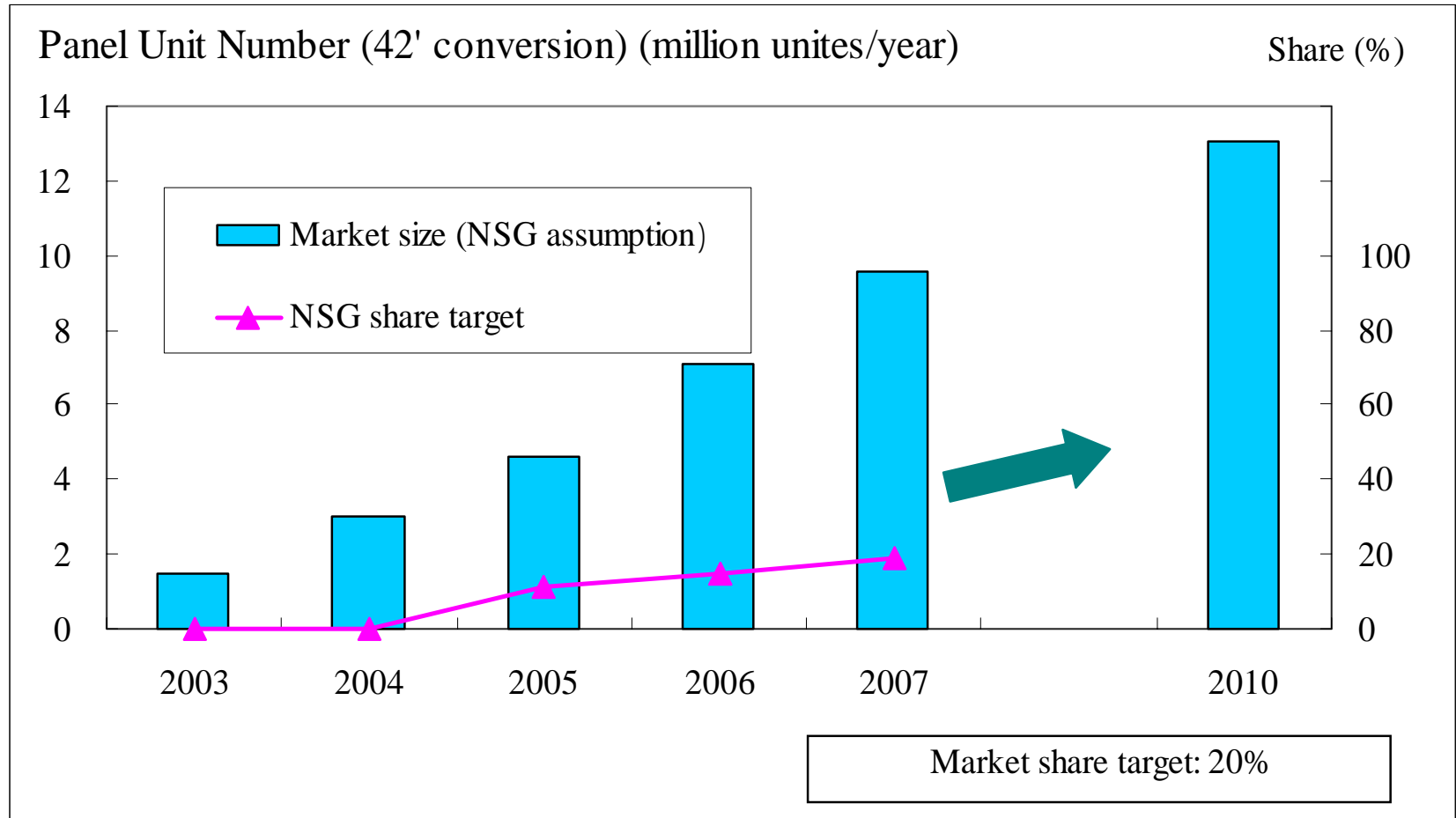
## Business Environment



# Information/Electronics - Display Glass

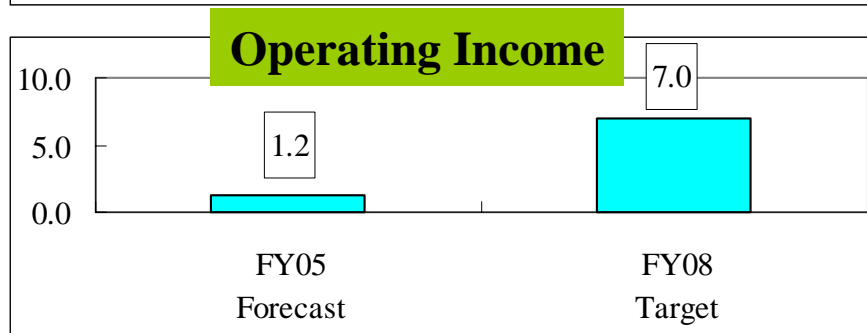
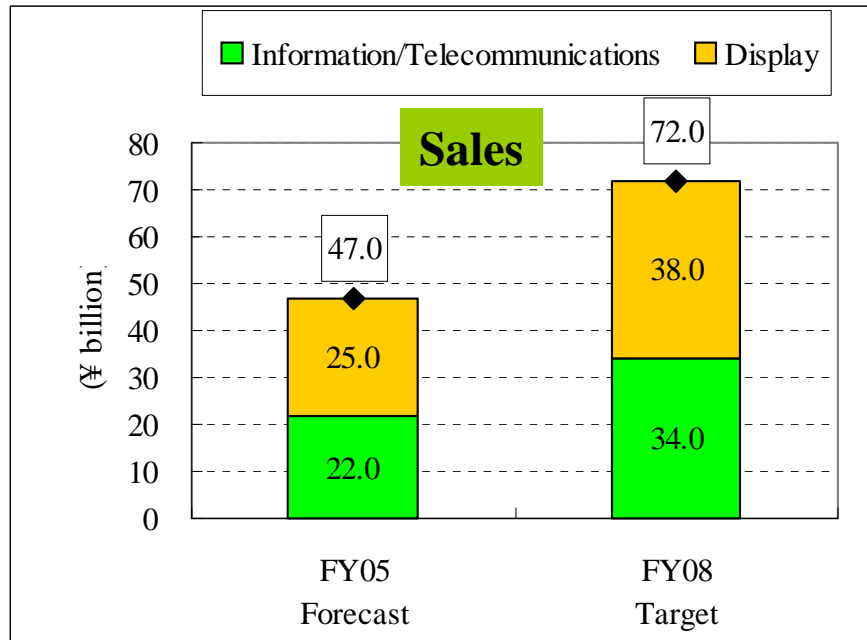


## Global PDP Market and NSG Share Target



# Information/Electronics

## - Expansion during CCP300



### <Information/Telecommunications Devices>

- Production increase of SLA for MFP
  - 5 million units/month
- Focus on communication equipment components

### <Display Glass>

- Penetration into PDP substrate market
- Stable increase in C-STN sales
- Expansion of TFT assembly operation (Nanox)
- Focus on active matrix display fabrication operations

# Glass Fiber Business

**NSG**  
NIPPON SHEET GLASS Co., Ltd

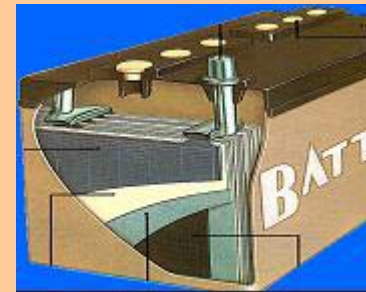
## Glass Cord

For automotive timing belts



## Battery Separator

For lead-acid batteries for automobiles,  
uninterrupted power supply equipment



## Glass Flake

Plastic reinforcement and anticorrosion filler  
Highly glittering metallic pigment



## Air Filter

For clean-rooms

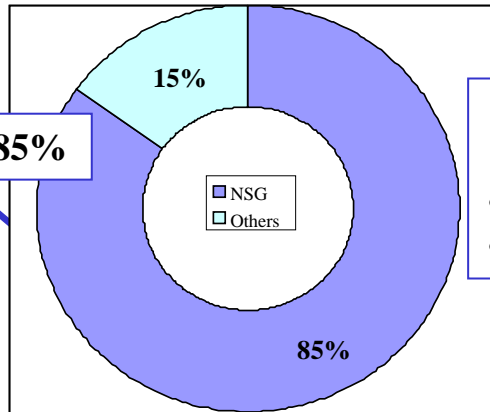


# Glass Fiber -

## Business Environment and Strategy

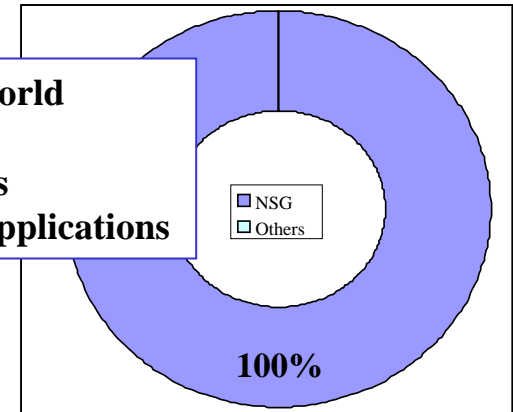


### Glass Cord



Global market share: 85%

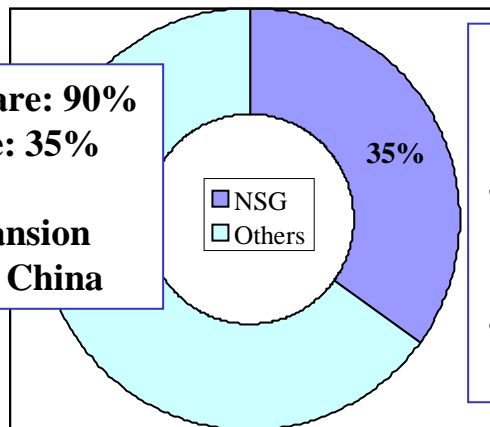
### Glass Flake, Metashine



Only one in the world

- Cosmetics applications
- Development of new applications

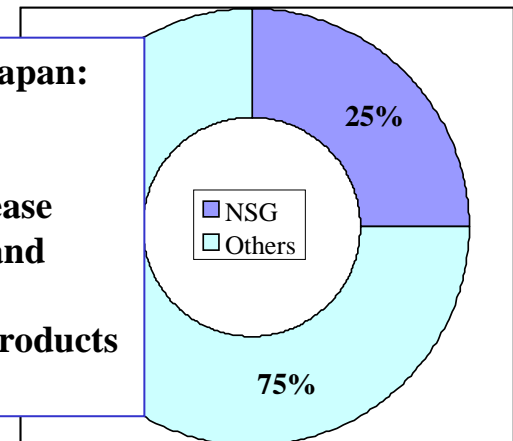
### Battery Separator



Domestic market share: 90%  
Asia market share: 35%

- Market share expansion through growth in China

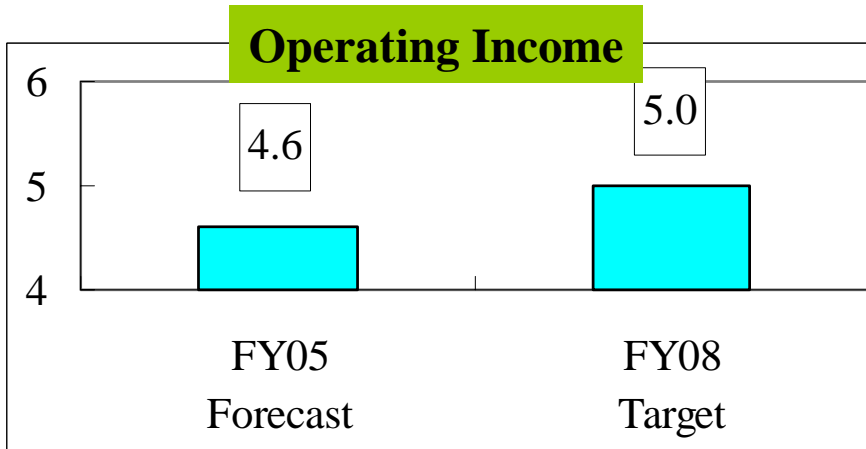
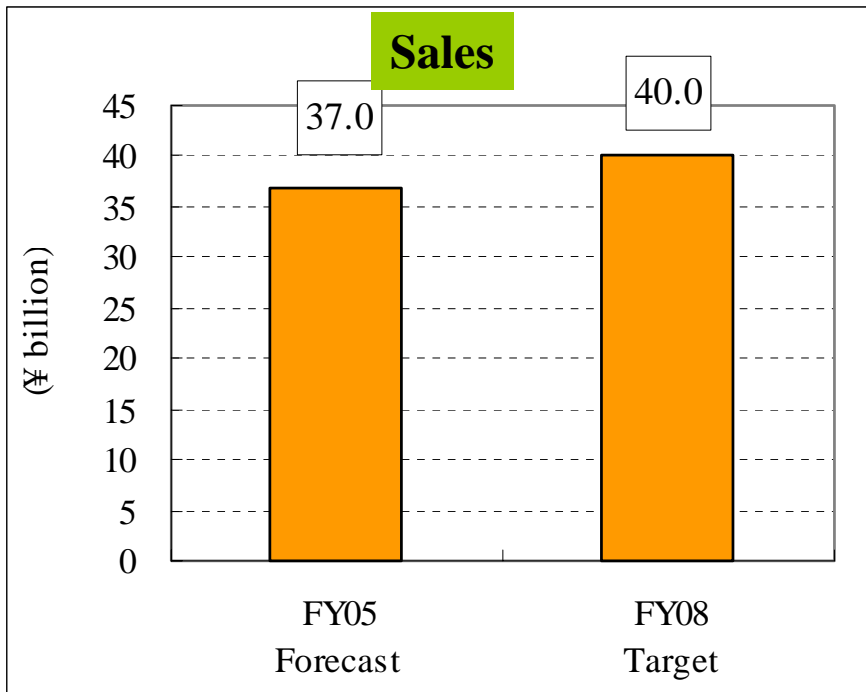
### Air Filter



Top market share in Japan:  
25%

- To meet demand increase from semi conductor and LCD plants
- Development of new products and new markets

# Glass Fiber - Expansion during CCP300



## <Glass Cord>

- Increase in automobile production

## <Battery Separator>

- Share increase in Asia

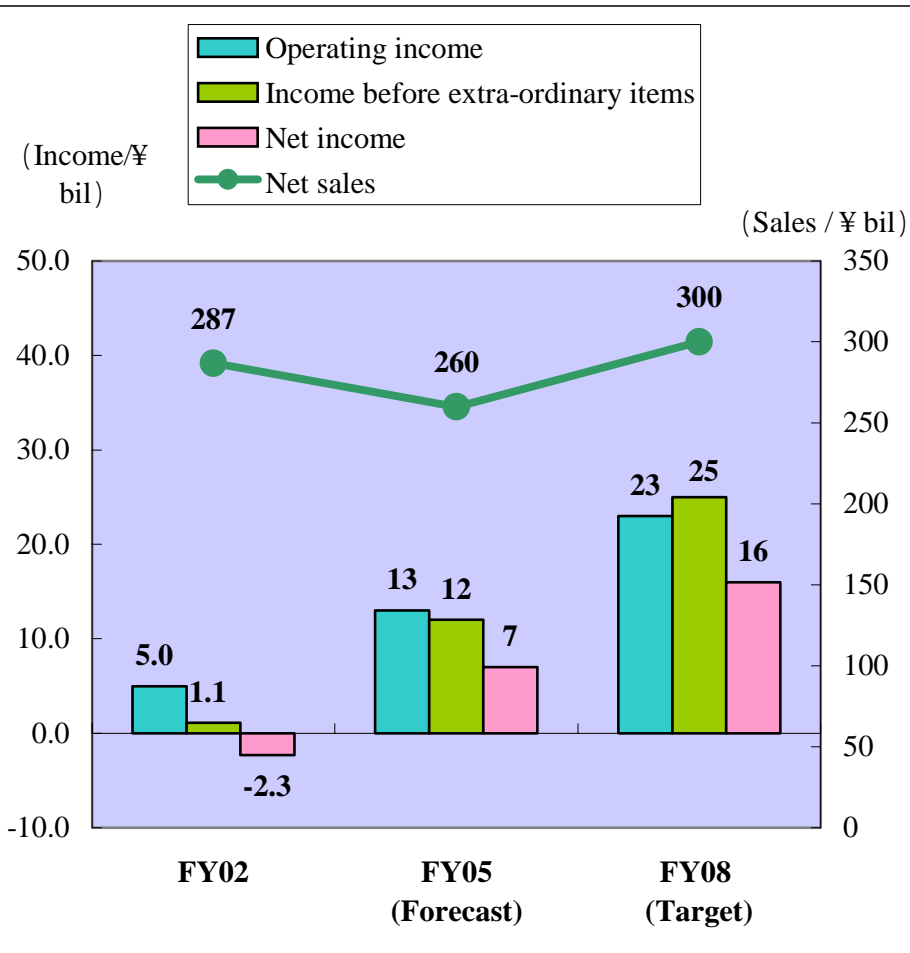
## <Air Filter>

- Expansion into medical market

## <Glass Flake>

- Development of new applications

# CCP300 - Performance Targets



| (¥ billion)                               | FY05         | FY08         |
|-------------------------------------------|--------------|--------------|
| <b>Sales</b>                              | <b>260.0</b> | <b>300.0</b> |
| Flat Glass                                | 164.0        | 182.0        |
| Information/Electronics                   | 47.0         | 72.0         |
| Glass Fiber                               | 37.0         | 40.0         |
| Others                                    | 12.0         | 6.0          |
| <b>Operating income</b>                   | <b>13.0</b>  | <b>23.0</b>  |
| Flat Glass                                | 8.0          | 12.0         |
| Information/Electronics                   | 1.2          | 7.0          |
| Glass Fiber                               | 4.6          | 5.0          |
| Others                                    | -0.8         | -1.0         |
| <b>Income before extra-ordinary items</b> | <b>12.0</b>  | <b>25.0</b>  |
| <b>Net income</b>                         | <b>7.0</b>   | <b>16.0</b>  |



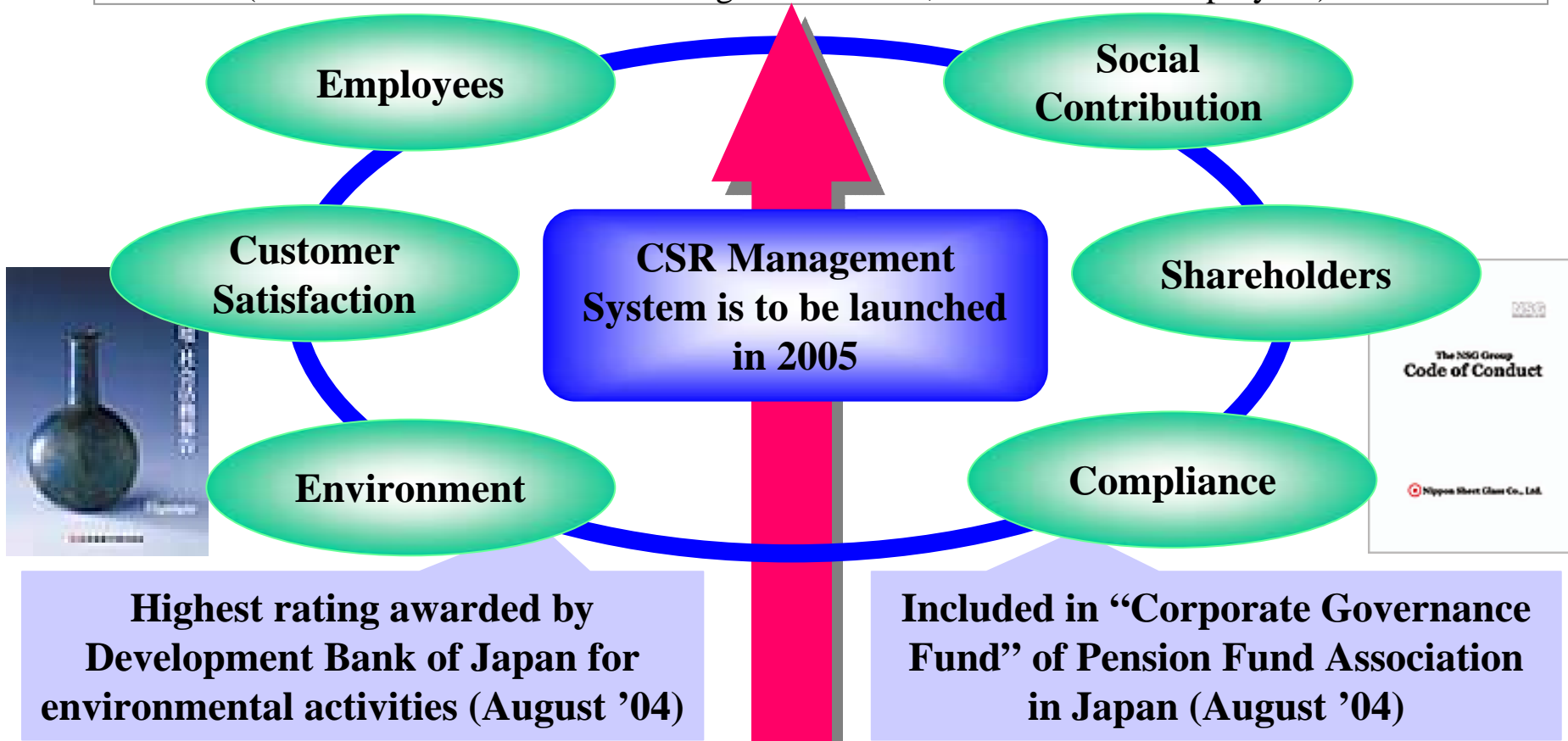
# CCP300 - CSR Activities

**NSG**

NIPPON SHEET GLASS Co., Ltd.

- New Vision***

**Improvement of corporate value** as a group  
(for all the stakeholders including shareholders, customers and employees)



- Management Principle:***

- Focus on social responsibilities of company and serve the community and the nation

# Notice



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

Nippon Sheet Glass Co., Ltd.