



# First Half Fiscal 2011 Presentation for IR Meeting

- April 1, 2011 to September 30, 2011 -

Tokuyama Corporation

Nov. 14, 2011

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# **1 Business Results for 1st Half FY2011**

## **1. Financial Highlights**

## **2. Analysis of Business Results**

**Year-on-year change**

**(Reference) Net Sales/Operating Income by Business Segment**  
**Compared with 1H FY2011 forecast**

① Business Results for 1H FY2011

**1. Financial Highlights ①**

Year-on-year change

(Billions of yen)

	1H FY2011 Results		1H FY2010 Results		Difference			
	Consolidated	Non-consolidated	Consolidated	Non-consolidated	Consolidated		Non-consolidated	
Income Statement					Amount	%	Amount	%
<b>Net sales</b>	<b>141.9</b>	<b>95.9</b>	<b>139.6</b>	<b>94.4</b>	+2.2	+2	+1.5	+2
Cost of sales	101.2	67.2	101.1	67.3	+0.1	+0	-0.0	-0
SG&A expenses	32.4	22.8	29.8	20.7	+2.6	+9	+2.1	+10
<b>Operating income</b>	<b>8.1</b>	<b>5.8</b>	<b>8.7</b>	<b>6.4</b>	-0.5	-7	-0.5	-9
Non-operating income/expenses	-2.5	-2.2	-2.7	-2.8	+0.2	+7	+0.6	-22
<b>Ordinary income</b>	<b>5.6</b>	<b>3.6</b>	<b>5.9</b>	<b>3.5</b>	-0.3	-6	+0.0	+2
Extraordinary gains/losses	-0.4	-0.4	-1.8	-2.9	+1.3	+74	+2.4	-84
<b>Income before income taxes</b>	<b>5.1</b>	<b>3.1</b>	<b>4.1</b>	<b>0.6</b>	+1.0	+25	+2.5	+400
Income taxes	2.4	1.0	1.1	0.2	+1.2	+103	+0.8	+394
<b>Net income</b>	<b>2.7</b>	<b>2.1</b>	<b>2.9</b>	<b>0.4</b>	-0.2	-7	+1.7	+403

① Business Results for 1H FY2011

**1. Financial Highlights ②**

Compared with the previous fiscal year-end

(Billions of yen)

	As of Sept. 30, 2011		As of March 31, 2011		Changes	
	Consolidated	Non-consolidated	Consolidated	Non-consolidated	Consolidated	Non-consolidated
Financial Position						
Total assets	494.6	431.5	474.7	412.6	+19.9	+18.9
Current assets	236.2	197.0	218.6	179.8	+17.5	+17.2
Fixed assets	258.4	234.4	256.0	232.7	+2.3	+1.6
Net assets	249.0	222.2	247.6	221.9	+1.4	+0.2
Shareholders' equity ratio	49.0%	51.5%	50.8%	53.8%	-1.8 points	-2.3 points

① Business Results for 1H FY2011

## 2. Analysis of Business Results

### ① 1st Half FY2011 Performance Highlights

### ② Net Sales/Operating Income by Business Segment Year-on-year change

① Business Results for 1H FY2011/ 2. Analysis of Business Results

① **1st Half FY2011 Performance Highlights** Year-on-year change

## Sales volume

Polysilicon: Sales volume was down due to the Great East Japan Earthquake  
 Cement: Sales volume was up owing to a slight recovery of private sector demand  
 Chemicals: Sales volume of some products, such as caustic soda and vinyl chloride resin, increased due to the temporary suspension of the competition's operations caused by the Great East Japan Earthquake

## Selling prices

Polysilicon: Selling prices fell due to the strong yen  
 Cement: Efforts to revise selling prices were made, and some price revisions were realized  
 Chemicals: The price revision of vinyl chloride resin and other petrochemicals was made to cope with higher naphtha prices

## Raw material and fuel prices

Both coal prices and naphtha prices were up

1 Business Results for 1H FY2011/ 2. Analysis of Business Results

② Net Sales/Operating Income by Business Segment Year-on-year change

(Billions of yen)

	1H FY2011 Results		1H FY2010 Results		Difference			
	Net sales	Operating income	Net sales	Operating income	Net sales	%	Operating income	%
Chemicals	42.7	0.8	38.7	1.2	+3.9	+10	-0.3	-31
Specialty Products	42.5	6.9	46.2	7.3	-3.6	-8	-0.3	-5
Cement	31.5	1.0	30.3	0.6	+1.2	+4	+0.3	+62
Advanced Components	21.9	1.1	21.4	1.1	+0.4	+2	+0.0	+1
Others	20.7	0.8	20.7	1.2	+0.0	+0	-0.3	-29
<b>Total</b>	<b>159.7</b>	<b>10.8</b>	<b>157.5</b>	<b>11.5</b>	<b>+2.1</b>	<b>+1</b>	<b>-0.7</b>	<b>-6</b>
Inter-segment eliminations and corporate-wide expenses	-17.7	-2.6	-17.8	-2.7	+0.0	+0	+0.1	+5
<b>Consolidated results</b>	<b>141.9</b>	<b>8.1</b>	<b>139.6</b>	<b>8.7</b>	<b>+2.2</b>	<b>+2</b>	<b>-0.5</b>	<b>-7</b>

\* Sales in each business segment include inter-segment sales

1 Business Results for 1H FY2011/ 2. Analysis of Business Results

## (Reference) Net Sales/Operating Income by Business Segment

Compared with 1H FY11 forecast  
 (Billions of yen)

	1H FY2011 Results		1H FY2011 Forecast		Difference			
	Net sales	Operating income	Net sales	Operating income	Net sales	%	Operating income	%
Chemicals	42.7	0.8	46.0	1.0	-3.2	-7	-0.1	-13
Specialty Products	42.5	6.9	47.5	9.0	-4.9	-10	-2.0	-23
Cement	31.5	1.0	31.0	0.5	+0.5	+2	+0.5	+102
Advanced Components	21.9	1.1	23.0	1.0	-1.0	-5	+0.1	+14
Others	20.7	0.8	20.5	1.0	+0.3	+2	-0.1	-13
<b>Total</b>	<b>159.7</b>	<b>10.8</b>	<b>168.0</b>	<b>12.5</b>	<b>-8.2</b>	<b>-5</b>	<b>-1.6</b>	<b>-13</b>
Inter-segment eliminations and corporate-wide expenses	-17.7	-2.6	-17.0	-3.0	-0.8	-5	+0.3	+12
<b>Consolidated results</b>	<b>141.9</b>	<b>8.1</b>	<b>151.0</b>	<b>9.5</b>	<b>-9.0</b>	<b>-6</b>	<b>-1.3</b>	<b>-14</b>

\* Sales in each business segment include inter-segment sales

## **2** Performance Forecasts for FY2011

**1.Future Business Environment**

**2.Performance Forecasts for FY2011**

## ② Performance Forecasts for FY2011

# 1. Future Business Environment

## Chemicals

- ◆ Business environment remains severe due chiefly to a fall in the export market prices of vinyl chloride-related products

## Specialty Products

- ◆ Market demand of both semiconductors and solar cells will be weak, due to the rapid slowdown in the world economy
  - Annual polysilicon sales volume is expected to be below that estimated in the initial forecast

## Cement

- ◆ Domestic demand is expected to be about level with the previous fiscal year (approx. 42 mil. tons)
  - We will strive to secure profit by further revising selling prices as well as implementing structural business reform

## Advanced Components

- ◆ We will continue strengthening the group management
  - Excel Shanon group strives to complete all the repair works by the end of Mar. 2012 to regain trust

② Performance Forecasts for FY2011

## 2. Performance Forecasts for FY2011

### ① Basis for Performance Forecast

### ② Performance Forecasts for FY2011

Year-on-year change

### ③ Performance Forecasts by Business Segment

Year-on-year change

### (Reference) Performance Forecasts for FY2011

Comparison of revised forecast to initial forecast

### (Reference) Performance Forecasts by Business Segment

Comparison of revised forecast to initial forecast

② Performance Forecasts for FY2011/ 2. Performance Forecasts for FY2011

① Basis for Performance Forecast (Revised)

	11/2H Forecast	11/1H Results	10/2H Results	10/1H Results
Domestic naphtha price (¥/kl)	52,000	56,950	48,750	46,200
Exchange rate (¥/\$)	80	80	82	89

**Basis for forecast at the beginning of FY2011**

**Domestic naphtha price : ¥62,000/kl**

**Exchange rate : ¥90/\$**

② Performance Forecasts for FY2011/ 2. Performance Forecasts for FY2011

② Performance Forecasts for FY2011 **Year-on-year change**

(Billions of yen)

	FY11 Revised Forecast		FY10 Results		Difference			
	Consolidated	Non-consolidated	Consolidated	Non-consolidated	Consolidated		Non-consolidated	
Revenue/Profits					Amount	%	Amount	%
Net sales	292.5	198.5	289.7	197.7	+2.7	+1	+0.7	+0
Operating income	16.0	12.5	20.1	15.9	-4.1	-21	-3.4	-22
Ordinary income	12.0	9.0	17.3	13.6	-5.3	-31	-4.6	-34
Net income	7.5	6.0	9.7	6.7	-2.2	-23	-0.7	-11

\* Revised Forecast for FY11: announced on Nov. 4, 2011

② Performance Forecasts for FY2011/ 2. Performance Forecasts for FY2011

③ Performance Forecasts by Business Segment Year-on-year change

(Billions of yen)

	FY11 Revised Forecast		FY10 Results		Difference			
	Net sales	Operating income	Net sales	Operating income	Net sales	%	Operating income	%
Chemicals	88.0	1.5	79.1	2.4	+8.8	+11	-0.9	-38
Specialty Products	90.5	14.0	96.7	16.3	-6.2	-7	-2.4	-15
Cement	64.0	2.5	64.4	2.0	-0.4	-1	+0.4	+20
Advanced Components	45.0	1.5	43.2	2.0	+1.7	+4	-0.5	-26
Others	41.0	1.5	41.2	2.3	-0.2	-1	-0.8	-37
<b>Total</b>	<b>328.5</b>	<b>21.0</b>	<b>324.9</b>	<b>25.2</b>	<b>+3.5</b>	<b>+1</b>	<b>-4.2</b>	<b>-17</b>
Inter-segment eliminations and corporate-wide expenses	-36.0	-5.0	-35.1	-5.1	-0.8	-2	+0.1	+3
<b>Consolidated results</b>	<b>292.5</b>	<b>16.0</b>	<b>289.7</b>	<b>20.1</b>	<b>+2.7</b>	<b>+1</b>	<b>-4.1</b>	<b>-21</b>

\* Sales in each business segment include inter-segment sales

② Performance Forecasts for FY2011/ 2. Performance Forecasts for FY2011

**(Reference) Performance Forecasts for FY2011**

**Comparison of revised forecast to initial forecast**  
 (Billions of yen)

	FY11 Forecast (as of Nov. 4)		FY11 Forecast (as of May 12)		Difference			
	Consolidated	Non-consolidated	Consolidated	Non-consolidated	Consolidated		Non-consolidated	
Revenue/Profits					Amount	%	Amount	%
Net sales	292.5	198.5	310.0	213.0	-17.5	-6	-14.5	-7
Operating income	16.0	12.5	20.0	16.0	-4.0	-20	-3.5	-22
Ordinary income	12.0	9.0	18.0	14.0	-6.0	-33	-5.0	-36
Net income	7.5	6.0	10.0	8.0	-2.5	-25	-2.0	-25

\* FY11 Initial Forecast: announced on May 12, 2011    FY11 Revised Forecast: announced on Nov. 4, 2011

② Performance Forecasts for FY2011/ 2. Performance Forecasts for FY2011

## (Reference) Performance Forecasts by Business Segment

Comparison of revised forecast to initial forecast  
 (Billions of yen)

	FY11 Forecast (as of Nov. 4)		FY11 Forecast (as of May 12)		Difference			
	Net sales	Operating income	Net sales	Operating income	Net sales	%	Operating income	%
Chemicals	88.0	1.5	94.0	2.0	-6.0	-6	-0.5	-25
Specialty Products	90.5	14.0	98.0	18.0	-7.5	-8	-4.0	-22
Cement	64.0	2.5	65.0	2.0	-1.0	-2	+0.5	+25
Advanced Components	45.0	1.5	46.5	1.5	-1.5	-3	0.0	0
Others	41.0	1.5	42.0	1.5	-1.0	-2	0.0	0
<b>Total</b>	<b>328.5</b>	<b>21.0</b>	<b>345.5</b>	<b>25.0</b>	<b>-17.0</b>	<b>-5</b>	<b>-4.0</b>	<b>-16</b>
Inter-segment eliminations and corporate-wide expenses	-36.0	-5.0	-35.5	-5.0	-0.5	-1	0.0	0
<b>Consolidated results</b>	<b>292.5</b>	<b>16.0</b>	<b>310.0</b>	<b>20.0</b>	<b>-17.5</b>	<b>-6</b>	<b>-4.0</b>	<b>-20</b>

\* Sales in each business segment include inter-segment sales

## **3** Topics

- 1. Second-phase Construction Project at Tokuyama Malaysia**
- 2. Establishment of Tianjin Tokuyama Plastics**
- 3. Establishment of JV to Produce Liquid Hydrogen**
- 4. Launch of Verification Test for Single Crystal Sapphire Wafers**
- 5. Plastic Window Sash Problem**

**3 Topics**

# 1. Second-phase Construction Project at Tokuyama Malaysia

**We plan to start operations earlier than previously planned  
 (Jan. 2015 ⇒ Apr. 2014)**

- Production capacity of Tokuyama Malaysia to total 20,000 tons/Y (Capacity of the plant under construction and the additional plant combined)
- We aim to raise current approx. 5% global share of polysilicon for solar cells to 10% or more

**【Outline of Second-phase Plant】**

Location	Samalaju Industrial Park in Sarawak, Malaysia
Production Capacity	13,800 tons/Y
Plant Construction Costs	Approx. ¥100 billion
Production Method	Siemens method
Target Usage of Polysilicon	Solar cells
Construction Plan	Commence construction in Apr. 2012 Aim to start operations in Apr. 2014 (9 months earlier than the previous plan: Jan. 2015)

3 Topics

## 2. Establishment of Tianjin Tokuyama Plastics

### Tianjin Tokuyama Plastics Co., Ltd. established

- Tokuyama established Tianjin Tokuyama Plastics Co., Ltd., a microporous film manufacturing company, in Jun. 2011 to meet growing disposable diaper market in China
- Operations will start Sept. 2012 (Production capacity: 120 million m<sup>2</sup>/Y, Investment: approx. ¥1.2 billion)
- Production capacity in China to increase to 360 million m<sup>2</sup>/Y (Combined capacity of Shanghai Tokuyama Plastics and Tianjin Tokuyama Plastics)

**【Corporate profile】**

Company Name : Tianjin Tokuyama Plastics Co., Ltd.  
 Location : Xiqing Economic Development Zone, Tianjin  
 Ownership : Tokuyama Corporation 100%  
 Capital : 5.9 million US dollars (approx. ¥490 million)  
 Establishment : June 2011  
 Start of Operations : September 2012 (Scheduled)  
 Number of Employees : Approx. 45  
 Representative : Tomoyasu Kawamura, President  
 Production Capacity : 120 million m<sup>2</sup>/Y



Signing ceremony held on May 2011

**3 Topics**

## 3. Establishment of JV to Produce Liquid Hydrogen

### Tokuyama established JV to produce liquid hydrogen with Iwatani Corporation

- New JV was established in Sept. 2011, and plans to construct a liquid hydrogen plant within the Tokuyama Factory for the startup of operations in autumn 2012
- The new JV will produce liquid hydrogen by using hydrogen supplied from Tokuyama. Iwatani will buy and sell all the liquid hydrogen produced by the new JV.

**【Corporate profile】**

Company Name : Yamaguchi Liquid Hydrogen Corporation

Head Office : Osaka-shi

Factory : Within the Tokuyama Factory  
(Shunan-shi, Yamaguchi Prefecture)

Capital : ¥10 million

Ownership : Iwatani 65%, Tokuyama 35%

Establishment : September 29, 2011

**【Facilities】**

Hydrogen Liquefier : 3,000L/h × 1

Liquid Hydrogen Storage Capacity : 270KL × 2



Signing ceremony with Iwatani Corp. held at the Yamaguchi prefectural office

**3 Topics**

## 4. Launch of Verification Test for Single Crystal Sapphire Wafers

**Tokuyama started verification tests for integrated production processes from the growth of sapphire single crystal to processing the grown crystal**

- Single crystal sapphire wafers with diameters of 2 to 4 inches are now mainly produced and used. Production of larger-diameter wafers is crucial to improving productivity and lowering costs.
- By utilizing crystallization-related technologies it has accumulated in the development of CZ method-based large-diameter  $\text{CaF}_2$  single crystals, Tokuyama has started verification tests for large-diameter single crystal sapphire wafers of 6 inches in diameter, aiming to produce them on a commercial basis.
- The Tokuyama Factory is in charge of the crystal growth process, and facilities at Misato-cho, Akita Prefecture are in charge of processing the grown crystal into wafers.  
In Nov. 2011, the Company started producing samples of single crystal sapphire wafers.



Large-diameter single crystal sapphire wafer of 6 inches in diameter

**3** Topics

## **5. Plastic Window Sash Problem**

### **Progress of action in the plastic sash problem**

Progress in obtaining authorizations issued by the Minister

- Excepting authorizations for special specifications, acquisition of the required authorizations for repair work was completed
- We aim to obtain authorizations for special specifications by the end of 2011

Progress of repair and replacement work

- Completed repairing 84% of 4,206 houses/buildings in question (as of Oct. 31)
- We use Excel Shanon's newly authorized products in the repair work
- We aim to complete all the repair works by the end of Mar. 2012

## **4** Progress in the Malaysia Project and Tokuyama Malaysia's Competitiveness

**1. Progress in the Malaysia Project**

**2. Tokuyama Malaysia's Competitiveness**

④ Progress in the Malaysia Project and Tokuyama Malaysia's Competitiveness

# 1. Progress in the Malaysia Project

- ① Progress in the 1st-phase Plant Construction
- ② Progress in the 2nd-phase Plant Construction
- ③ Timeline for Expansion of Production Capacity
- ④ Financial Plan

#### 4 Progress in the Malaysia Project and Tokuyama Malaysia's Competitiveness

### ① Progress in the 1st-phase Plant Construction

- The construction is progressing smoothly for the startup of operations in Jun. 2013
- 80 staff members were employed locally at Tokuyama Malaysia, 56 of whom are now learning operating technologies at the Tokuyama Factory
- Supply of electricity for construction began in Feb. 2011, and supply of electricity for production is scheduled to begin in Jun. 2012
- The Bakun Dam hydropower plant began partial operations in Aug. 2011
- In the Samalaju Industrial Park, 4 companies including Tokuyama Malaysia have started construction of their factories



The 1st-phase plant construction in progress



Local staff members receiving training on operational techniques at the Tokuyama Factory

#### 4 Progress in the Malaysia Project and Tokuyama Malaysia's Competitiveness

## ② Progress in the 2nd-phase Plant Construction

- Preparation of the ground for the 2nd-phase plant construction is underway
- We plan to start operations 9 months earlier than previously planned (in Jan. 2015 ⇒ Apr. 2014)

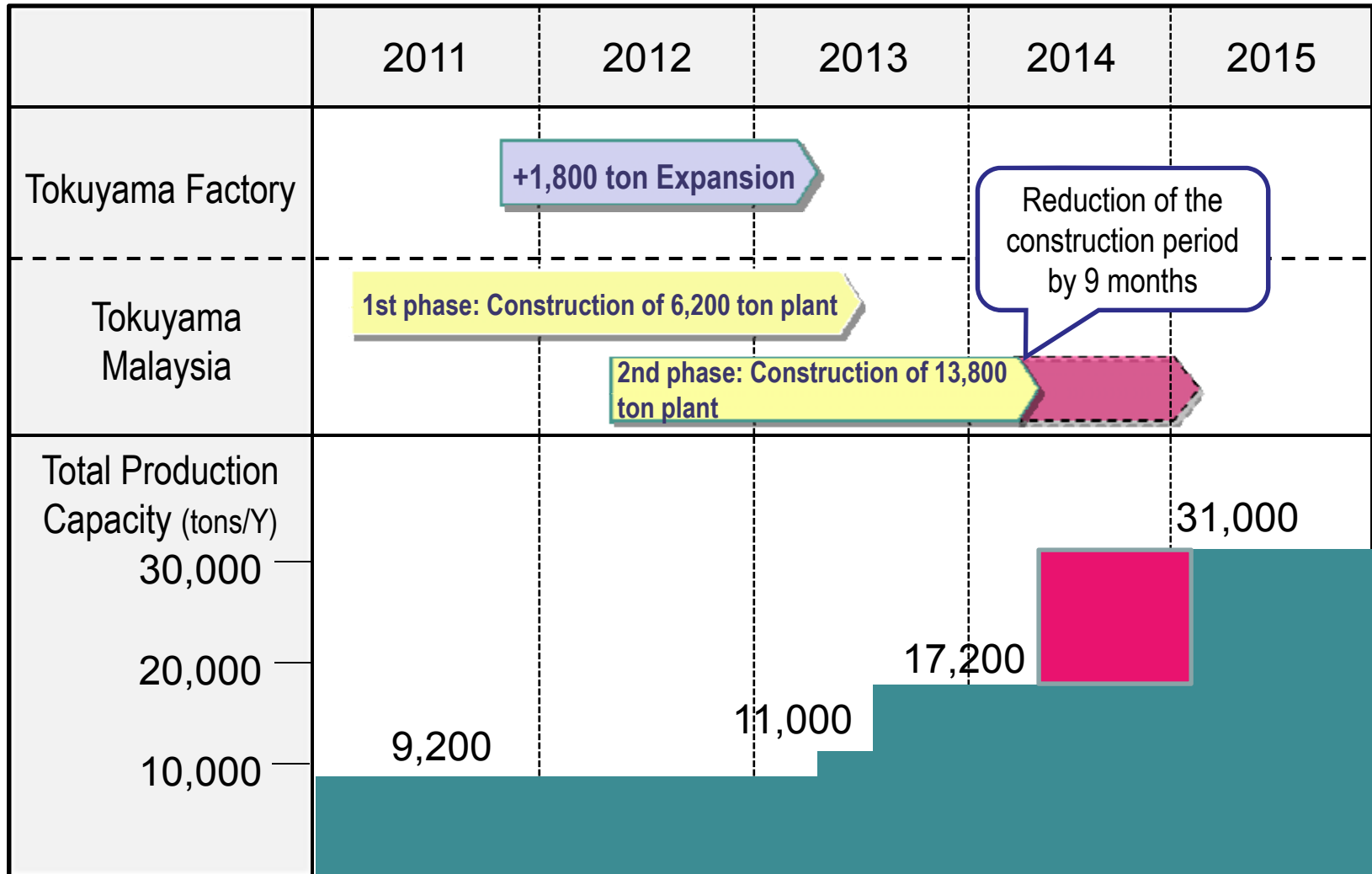


Preparation of the ground for the 2nd-phase plant construction

4 Progress in the Malaysia Project and Tokuyama Malaysia's Competitiveness

### ③ Timeline for Expansion of Production Capacity

(CY)



4 Progress in the Malaysia Project and Tokuyama Malaysia's Competitiveness

**④ Financial Plan**

(FY2011 through FY2014, Tokuyama + Tokuyama Malaysia)

[Cash inflow] Unit: Bil. yen

Cash on hand	60.0
<b>Net income</b> <b>+Depreciation expenses</b> <b>(Note1)</b>	<b>155.0</b>
Interest bearing debt	60.0
Advances received	20.0
<b>Total</b>	<b>295.0</b>

[Cash outflow] Unit: Bil. yen

1st-phase construction (amount outstanding)	20.0
2nd-phase construction	125.0
Other investments (including maintenance and renewal costs)	100.0
<b>Cash on hand, Dividend</b> <b>(Note1)</b>	<b>50.0</b>
<b>Total</b>	<b>295.0</b>

(Note1) Net income+ Depreciation expenses: up ¥15 billion  
 Cash on hand: up ¥15 billion

The figures of the above two items increase by ¥15 billion each compared with those in the material announced on Jun. 20, as we plan to start operations of the 2nd-phase plant 9 months earlier than previously planned.

4 Progress in the Malaysia Project and Tokuyama Malaysia's Competitiveness

## 2. Tokuyama Malaysia's Competitiveness

- ① Trend in the Solar Cell Market
- ② Forecast of Annual Installed Photovoltaic Capacity
- ③ Types and Features of Solar Cells
- ④ Supply-demand Forecast of Polycrystalline Silicon
- ⑤ Price Analysis of Polycrystalline Silicon
- ⑥ Tokuyama Malaysia's Quality-Competitiveness
- ⑦ Tokuyama Malaysia's Cost-Competitiveness
- ⑧ Purity and Cost of Polycrystalline Silicon by Polysilicon Manufacturer's Plant
- ⑨ Customers and Sales Contracts

#### 4 Progress in the Malaysia Project and Tokuyama Malaysia's Competitiveness

### ① Trend in the Solar Cell Market

#### 【To date】 **Subsidy-dependent**

Spread of solar cells backed by government policy and dependent on subsidies



- Reduction of subsidies due to the financial crisis mainly in Europe
- Lower PV equipment installation costs owing to mass production and standardization
- High probability that grid parity will be attained in the near future

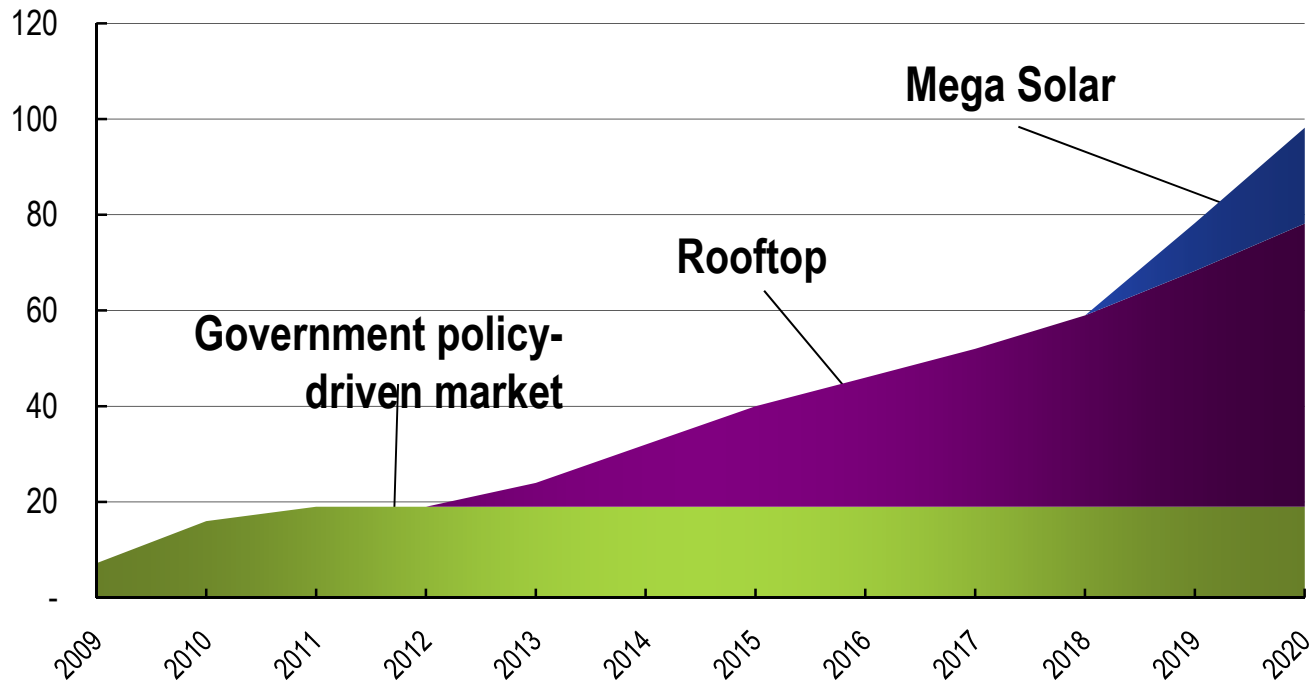
#### 【From now on】 **Economic rationality**

The use of such solar panels as can pay off their cost invested will become widespread

4 Progress in the Malaysia Project and Tokuyama Malaysia's Competitiveness

## ② Forecasts of Annual Installed Photovoltaic Capacity

Installed PV capacity (GW)



\*Tokuyama estimate

First, small- or medium-sized rooftop solar panels will be widely used owing to a fall in solar PV equipment installation costs (electricity generation costs), and then, with installation costs further lowering, new power producers will enter the PV market

4 Progress in the Malaysia Project and Tokuyama Malaysia's Competitiveness

### ③ Types and Features of Solar Cells

Single crystal solar cells		Polycrystalline solar cells
High	Conversion efficiency	Low
High	Manufacturing cost	Low
Small- or medium-sized solar PV equipment including rooftop solar panels	Application	Large-scale solar PV facilities including Mega Solar
High-purity polycrystalline silicon with 11N purity on a par with semiconductor-grade polycrystalline silicon	Polycrystalline silicon used as a raw material	Low-priced polycrystalline silicon with purity of 8N or higher

4 Progress in the Malaysia Project and Tokuyama Malaysia's Competitiveness

# ④ Supply-demand Forecast of Polycrystalline Silicon

Unit: Thousand tons

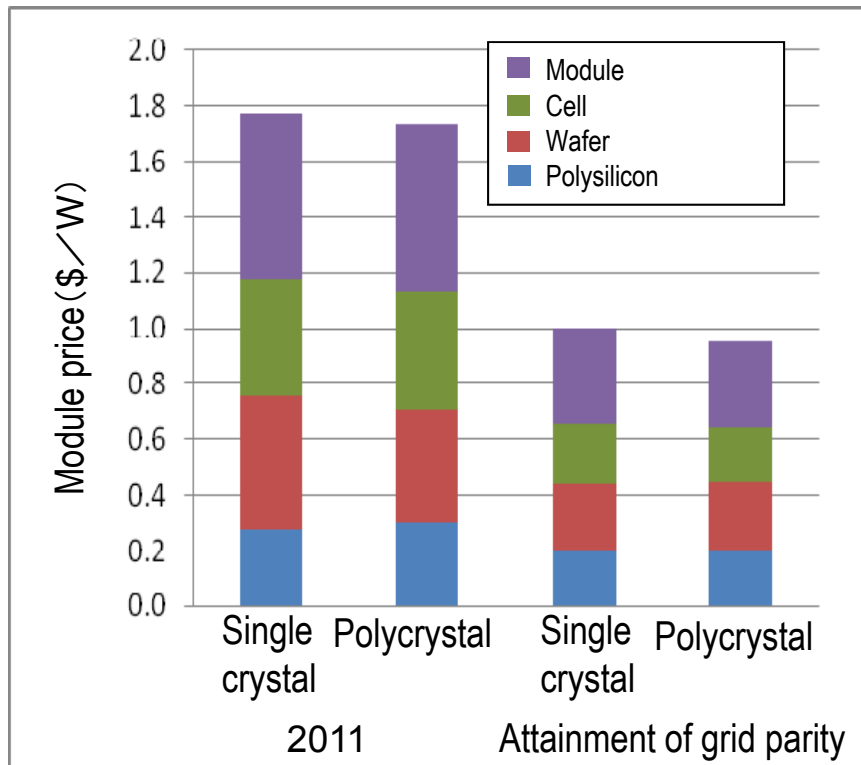
		2010	2015
Demand	Solar cells	100	200
	Semiconductors	30	40
	Total	130	240
Production capacity		180	350

\* Tokuyama estimate

4 Progress in the Malaysia Project and Tokuyama Malaysia's Competitiveness

# 5 Price Analysis of Polycrystalline Silicon

At the time of attainment of grid parity



At the time of attainment of grid parity, the module price will be \$1/W or less

The polycrystalline silicon cost accounts for roughly 20% of the module price

Taking into account improved conversion efficiency and wafers that will become thinner, we estimate the amount of polycrystalline silicon used to be 4.5~5.0g/W

At the time of attainment of grid parity, the polycrystalline silicon price will be \$40~45/kg

\* Tokuyama analysis

#### 4 Progress in the Malaysia Project and Tokuyama Malaysia's Competitiveness

## ⑥ Tokuyama Malaysia's Quality-Competitiveness

- Single crystal solar cells

In order to realize high conversion efficiency, polycrystalline silicon used requires a purity level on a par with semiconductor-grade polycrystalline silicon

- Polycrystalline solar cells

Low-purity polycrystalline silicon (including scrap) is blended in order to lower costs.  
High-purity polycrystalline silicon is needed to maintain quality appropriate for solar cells.

The Company has accumulated the manufacturing technologies and know-how to produce high-purity semiconductor-grade polycrystalline silicon for more than 20 years at its Tokuyama Factory  
⇒ Tokuyama Malaysia utilizes them to the full



Tokuyama Malaysia is highly competitive in quality, as it can produce high-purity 11N polycrystalline silicon in a stable manner

4 Progress in the Malaysia Project and Tokuyama Malaysia's Competitiveness

## 7 Tokuyama Malaysia's Cost-Competitiveness

Tokuyama estimates that the module price will be \$1/W or less at the time of attainment of grid parity. In that case, the polycrystalline silicon price is estimated at \$40~45/kg.

- Stable purchase of abundant, low-priced electricity (hydropower)  
 Electricity rate for industrial use in Sarawak : 7 US cents/kwh (source: MIDA website)  
 Tokuyama Malaysia can purchase electricity below this rate at cut prices.
- Incentives for investments by the Malaysian government  
 Investment Tax Allowance: An allowance of 100% on capex incurred within 5 years  
 ⇒ Tokuyama Malaysia can offset this allowance against 100% of its statutory income. (source: MIDA website)

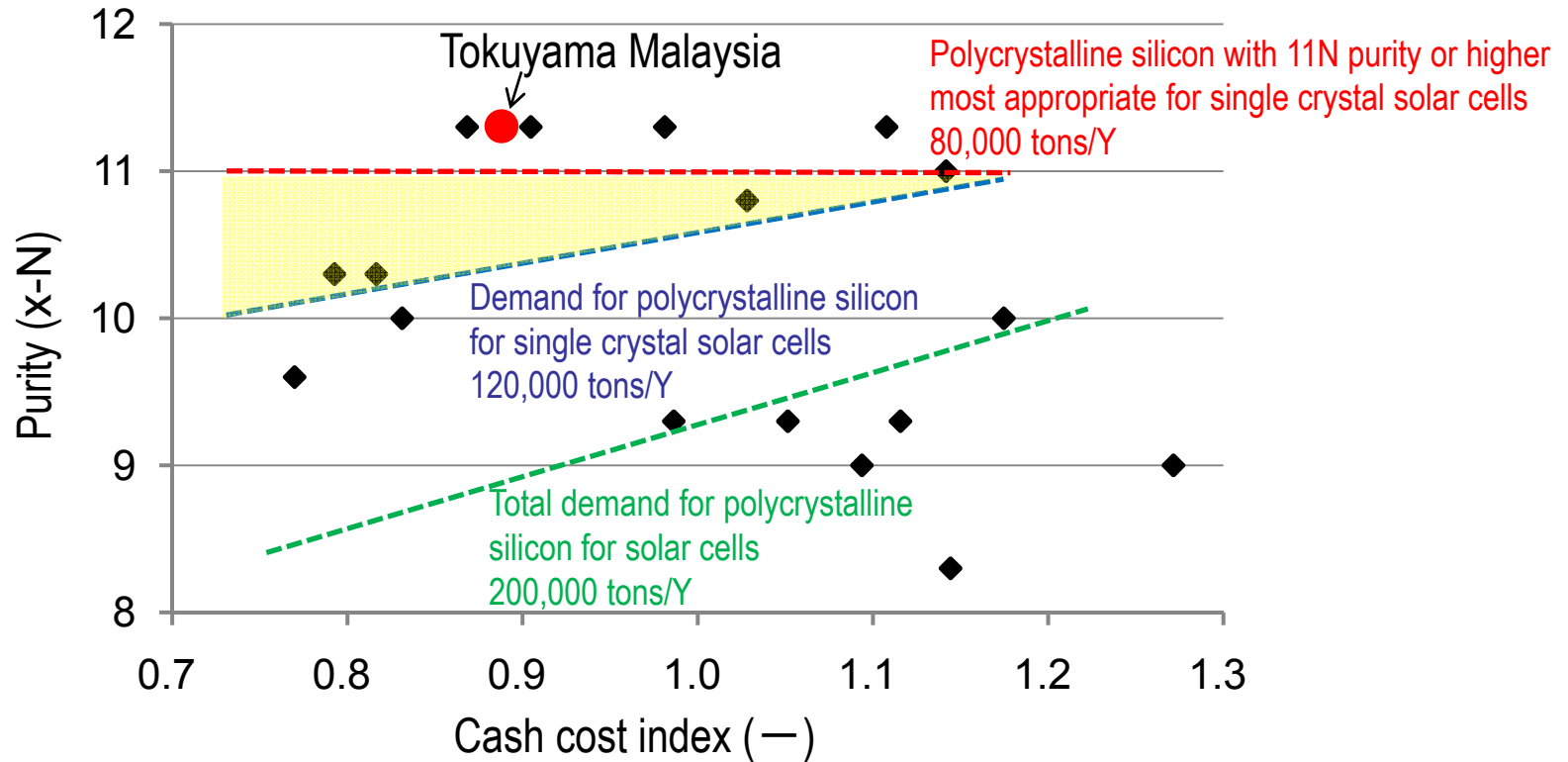
Various incentives for Tokuyama Malaysia



It is estimated that Tokuyama Malaysia's EBITDA margin will be approx. 50% when the polycrystalline silicon price is \$40/kg  
 ⇒ Tokuyama Malaysia has high cost-competitiveness

4 Progress in the Malaysia Project and Tokuyama Malaysia's Competitiveness

⑧ Purity and Cost of Polycrystalline Silicon by Polysilicon Manufacturer's Plant



Tokuyama Malaysia ranks as one of the top manufacturers in both purity and cost, and thus is highly competitive

\* Tokuyama's estimates on each plant of polysilicon manufacturers in 2015

\* Cash cost dose not include direct manufacturing costs on a cash payment basis and depreciation expenses

#### 4 Progress in the Malaysia Project and Tokuyama Malaysia's Competitiveness

## ⑨ Customers and Sales Contracts

### 【Customers】

Customers for Tokuyama Malaysia are leading solar-cell manufacturers in China, South Korea, Taiwan, Europe, U.S and Japan.

### 【Sales contracts】

- With regard to polycrystalline silicon that the first-phase plant will manufacture, Tokuyama Malaysia has signed long-term contracts with customers and has almost sold it out.
- With regard to polycrystalline silicon that the second-phase plant will produce, it is currently negotiating sales contracts with customers by offering a package of advances received and long-term contracts

Chemistry with a heart

**TOKUYAMA**



## **5** Supplementary Data

**1. Supplementary Financial Data**

**2. Performance Trend**

**3. Price Trend of Main Raw Material and Fuel**

**4. Principal Indicators**

5 Supplementary Data

# 1. Supplementary Financial Data ① Non-operating income/expenses

(Billions of yen)

		1H FY11	1H FY10	Changes	Notes	
income	Non-operating	Interest and dividend income	0.3	0.3	-0.0	
		Other income	1.5	1.5	-0.0	
		<b>Total</b>	<b>1.8</b>	<b>1.9</b>	<b>-0.0</b>	
expenses	Non-operating	Interest expenses	0.9	0.8	-0.1	
		Other expenses	3.4	3.8	+0.3	Decrease in foreign exchange loss: +0.3
		<b>Total</b>	<b>4.4</b>	<b>4.7</b>	<b>+0.2</b>	
<b>Non-operating income/expenses</b>		<b>-2.5</b>	<b>-2.7</b>	<b>+0.2</b>		

5 Supplementary Data

# 1. Supplementary Financial Data ② Extraordinary gains/losses

(Billions of yen)

	1H FY11	1H FY10	Changes	Notes
Extraordinary gains	0.1	1.1	-1.0	Decrease in proceeds from national subsidy : -0.5 Decrease in gain on sale of investment securities : -0.4
Extraordinary losses	0.5	3.0	+2.4	※
Extraordinary gains/losses	-0.4	-1.8	+1.3	

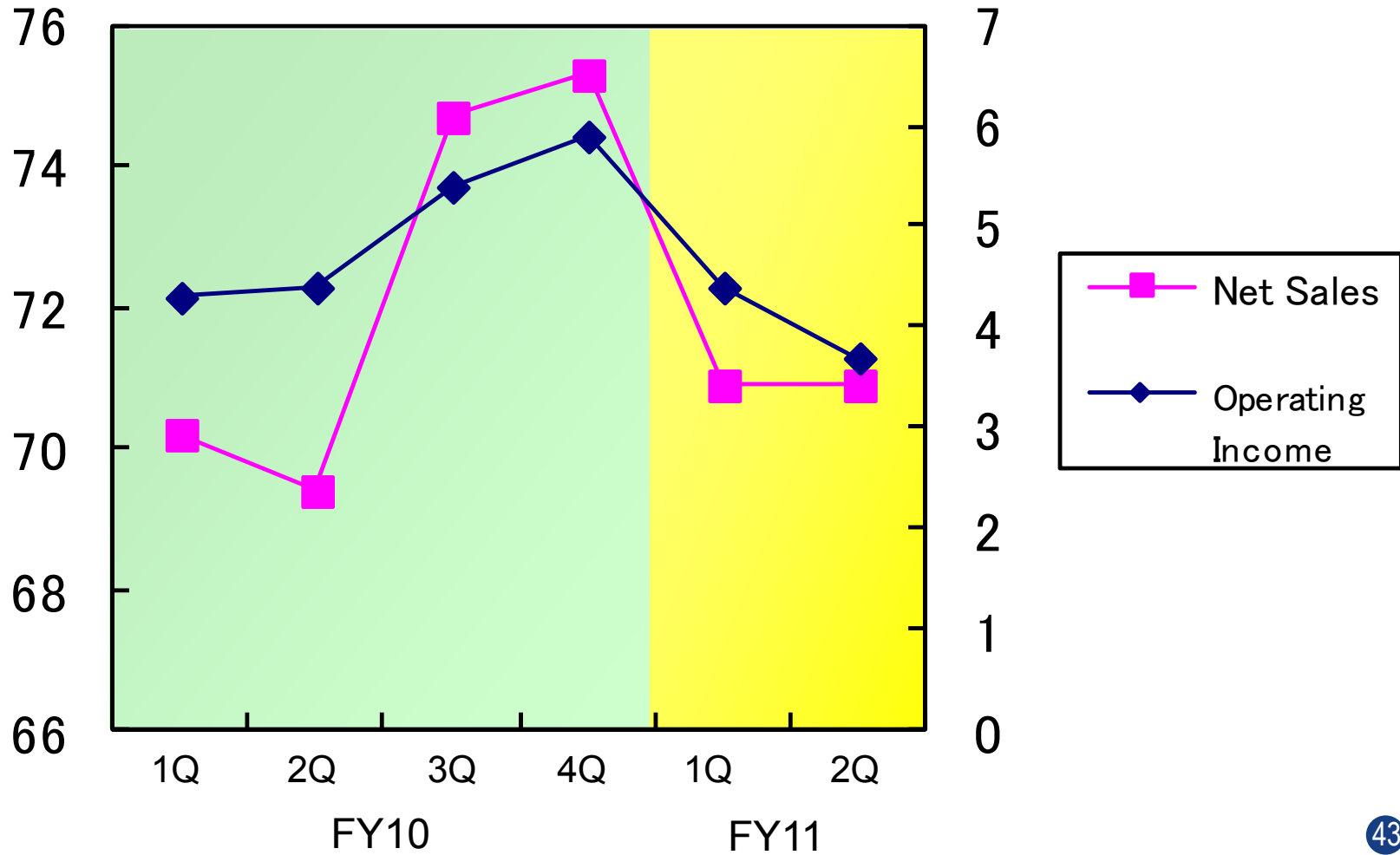
- ※ Decrease in loss from closing business : +0.8
- Decrease in provision for loss from closing business : +0.6
- Decrease in provision for loss on compensation for products : +0.7

5 Supplementary Data

## 2. Performance Trend ①

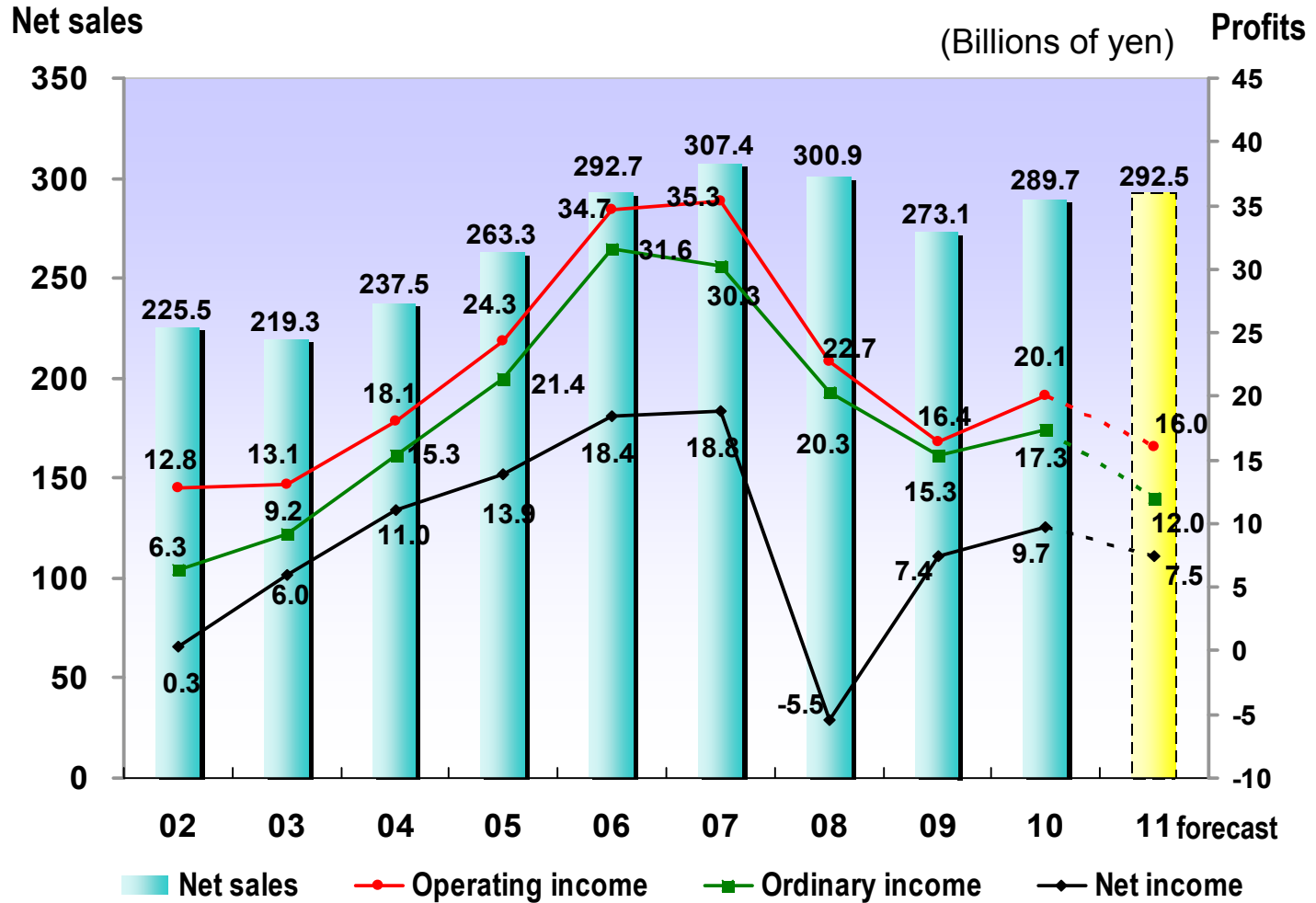
Net Sales (Billions of yen)

Operating Income (Billions of yen)



5 Supplementary Data

## 2. Performance Trend ②

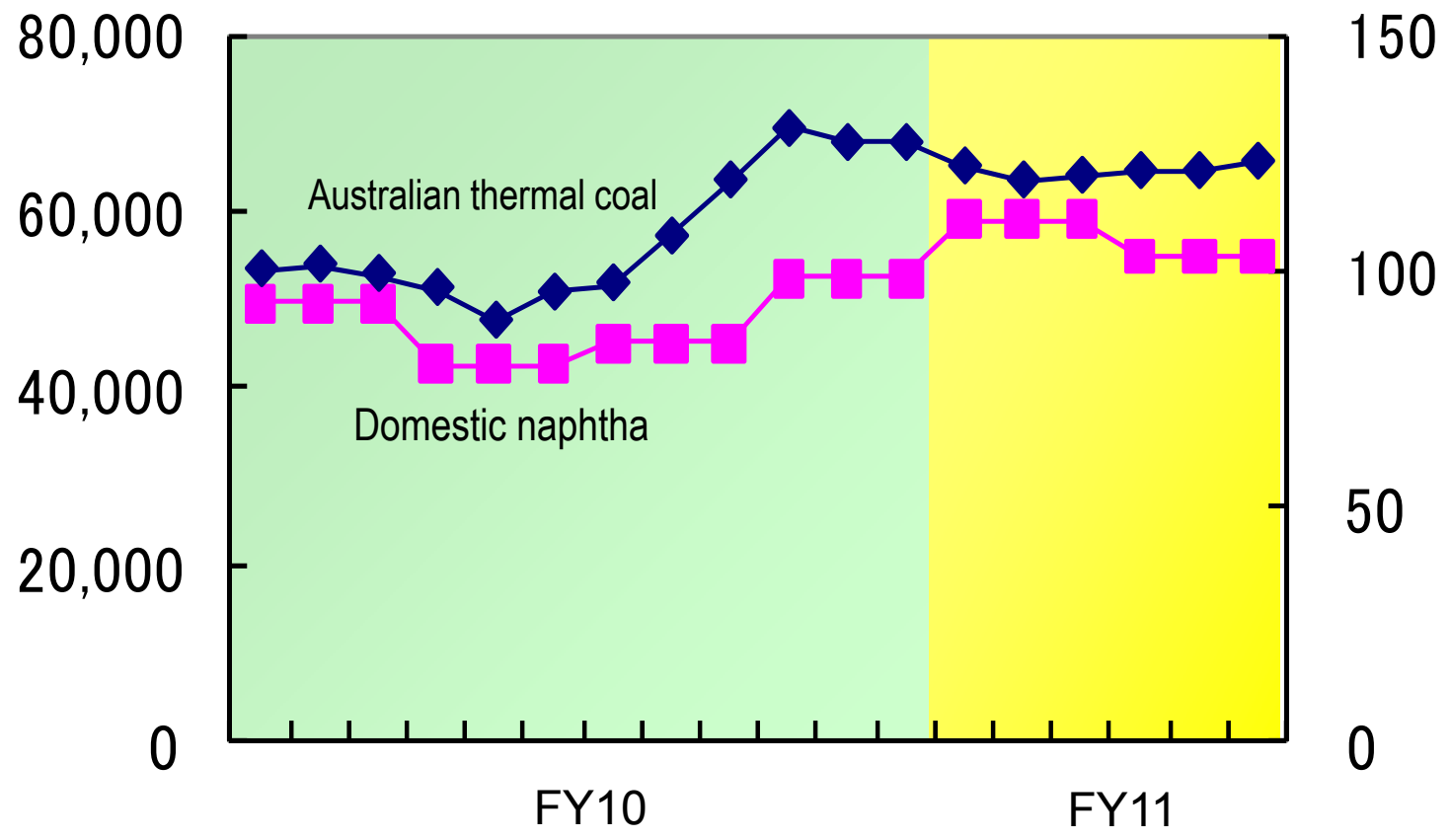


5 Supplementary Data

### 3. Price Trend of Main Raw Material and Fuel

Domestic naphtha price (¥/KL)

Australian thermal coal spot price (\$/t)



5 Supplementary Data

# 4.Principal indicators ① Year-on-year change

		1H FY2011		1H FY2010		Changes	
		Consolidated	Non-consolidated	Consolidated	Non-consolidated	Consolidated	Non-consolidated
Capital expenditures	Billions of yen	32.0	6.8	11.6	5.6	+20.4	+1.2
Depreciation and amortization	Billions of yen	13.6	11.2	15.3	13.0	-1.7	-1.8
R&D expenses	Billions of yen	5.5	4.4	5.8	4.8	-0.2	-0.3
Financial income and expenses	Billions of yen	-0.6	+1.9	-0.4	+0.4	-0.1	+1.4

5 Supplementary Data

**4.Principal indicators ②** Compared with the previous fiscal year-end

		As of Sept. 30, 2011		As of Mar. 31, 2011		Changes	
		Consolidated	Non-consolidated	Consolidated	Non-consolidated	Consolidated	Non-consolidated
Interest-bearing debts	Billions of yen	149.9	130.5	126.2	107.6	+23.7	+22.8
Number of employees	Persons	5,666	2,207	5,493	2,195	+173	+12

5 Supplementary Data

4.Principal indicators ③ Year-on-year change based on FY11 forecast

(Billions of yen)

		FY11 Forecast		FY10 Results		Changes	
		Consolidated	Non-consolidated	Consolidated	Non-consolidated	Consolidated	Non-consolidated
Capital expenditures	Approved limit total	57.2	27.4	47.4	28.0	+9.8	-0.6
	Estimates	47.7	17.4	—	—	—	—
	Results	—	—	35.8	13.3	—	—
Depreciation and amortization		28.4	23.7	31.4	26.7	-2.9	-3.0
R&D expenses		11.6	9.3	11.4	9.4	+0.1	-0.0