# FY2012 Financial Forecast and Management Policy

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### **FY2011 Review**



## **FY2011 Consolidated Financial Results**

(Billions of Yen)

	FY2010	FY2011	YoY Change	
Net Sales	418.6	668.7	+59.7%	
Operating income	-2.1	97.8	+100.0	
Operating margin	-0.5%	14.6%	+15.1 <sub>pts</sub>	
Income before income taxes	-7.7	99.5	+107.3	
Net income	-9.0	71.9	+80.9	
Dividend per share (Yen)	12	114	+102	

## FY2011 Results

- Net sales ¥668.7 billion, up 59.7%
- Operating income ¥97.8 billion, up ¥100 billion
- Profitability improved
  - Gross profit margin: 35.1%
  - SPE segment pre-tax profit margin: 23.6%
- R&D expenses: ¥70.5 billion, record level
- Operating cash flow: ¥83.2 billion generated
- Executing production facility strategy
  - Started construction of new Miyagi Plant
  - Decided to construct new plant in Kunshan City, Jiangsu Province, China

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## **FY2011 New Products**

# Introduced high performance, high productivity and low power consumption products

- RLSA plasma etch system "Tactras<sup>™</sup> RLSA<sup>™</sup> Etch"
- Plasma enhanced batch thermal ALD system "TELINDY PLUS™ IRad ™ SA"
- Plasma processing system "Trias<sup>™</sup> e+ SPA*i*"
- Gas chemical etch system "Certas WING™ "
- SiC epitaxial system "Probus-SiC™"



### **Business Environment**



## **CY2011 Business Environment**

### SPE capex

Although 1<sup>st</sup> first half capex is expected to be slightly below the initial forecast due to the effects of the Japan earthquake, expecting increase in 2<sup>nd</sup> half. Because investments for NAND, Logic/Foundry are still strong, overall capex for the year is expected to increase 10%.

#### FPD capex

Although large panel investment in adjustment phase, small and mid-sized panel investment for smartphones is strong and overall capex expected to be about same level as 2010

#### PV capex

Currently, single crystal silicon and Cd-Te strong, good future potential for thin-film silicon as conversion efficiency improves



## **CY2011 WFE CAPEX by Application**



#### Investments for NAND & Logic/Foundry are expanding

Source: Gartner Dataquest, TEL 8

### **Quarterly Orders**



### SPE Orders by Application (equipment only)



**TOKYO ELECTRON** 

### **FY2012 Financial Estimates**



## **The Great East Japan Earthquake Status**



All TEL group plants and facilities in affected area (Tohoku area) are now in operations

## **Disaster Response**



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## **FY2012 Financial Estimates**

(Billions of Yen)

			FY2012 (E)			
		FY2011	1 <sup>st</sup> half	2 <sup>nd</sup> half	Full year	YoY change
Net Sales		668.7	335.0	395.0	730.0	+9%
	SPE	511.3	253.0	306.0	559.0	+9%
	FPD/PVE	66.7	38.0	38.0	76.0	+14%
	EC/CN	90.2	44.0	51.0	95.0	+5%
	Others	0.4	-	-	-	-
Operating income		97.8 14.6%	35.0 10.4%	65.0 16.5%	100.0 13.7%	+2.1 -0.9pts
Income before income taxes		99.5	36.0	66.0	102.0	+2.4
Net income		71.9	23.0	43.0	66.0	-5.9
EPS	G (Yen)	401.7	128.5	240.1	368.6	-33.1

1. SPE: Semiconductor Production Equipment, FPD/PVE: Flat Panel Display and Photovoltaic Cell Production Equipment, EC/CN: Electronic Components and Computer Networks

2 YoY changes and profit ratios are calculated using full amounts, before rounding.

#### Although there are some earthquake effects in the 1<sup>st</sup> half, overall sales and operating profit increase YoY

## **R&D Expenses and CAPEX**



#### FY12(E) R&D details

- Existing business: around 60%
- New business field: around 40%
  - (RLSA application expansion, 3DI, OLED, Test, PV, etc)



#### FY12(E) CAPEX details

- New Miyagi plant
- New Kunshan (China) plant
- Process Technology Center (Korea)
- TEL Technology Center Tsukuba
- Equipment and measurement tools

# ¥12 billion out of total investments are for new plants and new business expansion



## **FY12 Dividend Forecast**



#### Dividend payout ratio 35.3%, expecting dividend per share increase

\*Changed dividend payout ratio from 20% to 35% from FY11 year end dividend.

## **Consolidated Financial Outlook**



# While keeping proactive investments in R&D, improving profitability at the same time

## **Management Policy**



#### Market changes

- Customers becoming oligopolies
- As mobile market expands, NAND and foundry demand increasing
- Increasing lifespan of equipment

#### Technology changes

- Increasing complexity of technology Double patterning, EUV, 3D memory
- New Solutions— 3DI technology



## **SPE Business Strategy**

- 1. Unify development and manufacturing in high growth etcher business at new Miyagi plant
- 2. Enhance our position in the wafer cleaning market
- 3. Enhance technology differentiation of our SPE products
- 4. Pursue new technologies (3DI, test systems)
- 5. Expand field solutions business
- 6. Enhance upstream collaboration with customers



New Miyagi Plant



TEL Technology Center, Taiwan



Process Technology Center (Korea)



## **Etcher**



- Share slightly declined from CY2009 (due to increase in proportion of memory capex)
- Oxide etcher: Expanded share in HARC for DRAMs and BEOL
- Silicon etcher: Won new POR orders from several customers (including RLSA etcher)
- POR net increase: Over 20 processes

## **Cleaning System**



Market: Gartner Dataquest TEL share: TEL estimate

- Share slightly increased from CY2009
- Single wafer cleaning: succeeded in placing evaluation tools in several customers
- Scrubbers share 40%, dry cleaning share 60%

### **Global R&D Bases**



#### Expanding R&D functions focusing on leading edge technology



## Main Businesses: Key Actions in FY2012

#### **Coater /Developer**

- Maintain/grow share for immersion lithography
- Develop technology with EUV lithography products in an inline environment

#### Thermal processing system

- Grow share and enhance position especially in Korean market
- Strengthen business base through full-scale entry into ALD and other new markets

#### Single wafer deposition system

- Develop new products to address broad needs in metal film deposition
- Establish process using Ru and lead its broad adoption

#### RLSA

- Accelerate widespread sales for low-damage Poly etch processes
- Build a ¥50 billion business including application of CVD

## Main Businesses: Key Actions in FY2012

#### 3DI

- Promote evaluation and adoption of etching/deposition/bonding tools by multiple customers
- Expand sales of reverse exposure Fusion Bonder for CIS\*

#### Test system

- Further enhance profitability
- Develop new systems to meet decline in test costs

#### **Field solutions**

- Respond flexibly to new investment and expansion mainly in the commodity device market
- Targeting ¥150 billion sales through used equipment, modification and service contract business



## **Changes in Markets and Technology: FPD**

#### Market changes

- Capex for large TV displays becoming centered on China
- Active investment in small- and mid-sized displays for touch panels
- Emergence of Korean equipment makers, intensifying cost competition

#### Technology changes

- Trend for enlarging mother glass size has peaked, small, mid-sized ratio increasing
- High definition, high speed
- Post liquid crystal OLED





## **Establishing FPD Plant in China**

#### Objectives

- **Business details**
- Strengthen our customer response capabilities
- Enhance cost competitiveness
- Preventative maintenance for electrode of FPD production equipment for Chinese market
- To become a base for modification and manufacturing of certain existing equipment

Location: Kunshan, Jiangsu Province Construction start: January 2011 Planned completion: January 2012 Total investment: ¥5.0 billion





## **Initiatives in the Growing OLED Market**

#### Evaporation Method TEL own technology

**Precision deposition control** 

Effective use of highly organic materials

Space saving design

### **Inkjet Method**

#### Collaboration with Seiko Epson

Separate RGB layers with one coating

Accumulated knowledge of large glass substrate production

High quality print technology

## **OLED Roadmap**





### PV Market Forecast (2010-2020)



GWp (Giga watt peak) is the unit for the maximum level of output: the normal output level of one nuclear reactor is about 1GW Source: TEL forecasts based on EPIA (European Photovoltaic Industry Association) announcement



## **Establish TEL Technology Center Tsukuba**

#### **Objectives**

- Expected benefits
- Accelerate R&D in base and core technologies
- Develop technology to raise efficiency of thin film Si PVE
- Collaborate with research institutes and universities etc. in Japan's largest research location
- Promote networking with other industries
- Recruit top class engineers

Location: Tsukuba, Ibaraki Construction start: August 2011 Planned completion: March 2012 Total investment: ¥7.0 billion Staffing: approx. 100



## FY2012 Overview

#### SPE

Strengthen existing business

Specifically, improve upon our position in etch and cleaning systems Promote 3DI and test system business development

### ► FPD, OLED, PV

Enhance competitiveness by new China plant Upfront investment to secure medium-term growth

#### Start-up in each new facility

Miyagi, Tsukuba, Korea

# Strengthen our core technologies and developments of adjacent areas, and lead the markets in technology and products



#### Disclaimer regarding forward-looking statement

Forecast of TEL's performance and future prospects and other sort of information published are made based on information available at the time of publication. Actual performance and results may differ significantly from the forecast described here due to changes in various external and internal factors, including the economic situation, semiconductor/FPD/PV market conditions, intensification of sales competition, safety and product quality management, and intellectual property-related risks.

#### Processing of numbers

For the amount listed, because fractions are rounded down, there may be the cases where the total for certain account titles does not correspond to the sum of the respective figures for account titles. Percentages are calculated using full amounts, before rounding.

#### Exchange Risk

In principle, export sales of Tokyo Electron's mainstay semiconductor and FPD/PV cell production equipment are denominated in yen. While some settlements are denominated in dollars, exchange risk is hedged as forward exchange contracts are made individually at the time of booking. Accordingly, the effect of exchange rates on profits is negligible.

FPD/PV: Flat panel display/Photovoltaic