

12M rating **BUY (Initiate)**

12M TP **W16,000**

Up/downside **+34%**

## Stock Data

KOSPI (Jun 19, pt)	1,892
Stock price (Jun 19, KRW)	11,950
Market cap (USD mn)	122
Shares outstanding (mn)	12
52-Week high/low (KRW)	23,200/10,100
6M avg. daily turnover (USD mn)	0.8
Free float / Foreign ownership (%)	36.3/35.6
Major shareholders (%)	
TOKAI CARBON Co.,Ltd	35.4
KC TECH Co.,Ltd	28.3

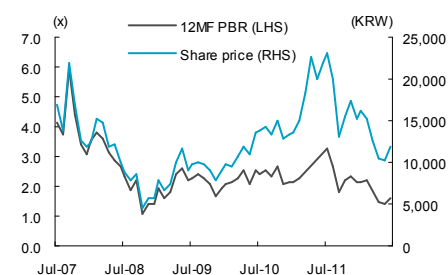
## EPS revision (KIS estimates, KRW)

	Previous	Revised	(%)
2012F		997	-
2013F		1,384	-
2014F		1,608	-

## Performance

	1M	6M	12M
Absolute (%)	14.4	(18.2)	(40.3)
Relative to KOSPI (%p)	8.2	(24.6)	(33.4)

## 12MF PB trend



Source: WISEfn consensus

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## Weathering the storm with carbon graphite

### Initiate coverage with BUY and TP W16,000

We initiate coverage of Tokai Carbon Korea (TCK) with BUY and TP W16,000 at PB 2.3x (2012F BPS W7,046). TCK's major products include 1) high-purity graphite parts used in the casting crucibles (hot zone) of semiconductor and PV wafer ingot growers and 2) susceptors for metal organic chemical vapor deposition (MOCVD) equipment used to make light-emitting diode (LED) chips. After a stagnant period in 2012, sales and OP should grow 30.3% YoY and 39.5% YoY, respectively, in 2013F.

### Downstream to recover in 2013 after a stumble in 2012

Although conditions for the downstream industries – semiconductor wafers, solar PV ingots and LED equipment – should remain sluggish in 2012, we believe these industries will enter a recovery phase in 2013 as oversupply eases. Of note, we expect 1) semiconductor wafer usage to increase 14% YoY in 2013, 2) solar PV silicon wafer shipments to grow 25% YoY in 2013F and 3) the LED equipment market to revitalize in 2013.

### Constant replacement demand, stable raw materials sourcing

We see 90% of TCK's sales coming from replacement demand. With replacement cycles for its products spanning two to six months, TCK can generate stable sales and OP. Chances are slim that raw material shortages will disrupt production as TCK sources all its needs from Tokai Carbon, its parent company in Japan.

### Sufficient capacity to speed up future sales growth

TCK built their second plant in Apr 2011 and additional equipment will be delivered in 2012. By taking advantage of sufficient capacity, TCK will lift utilization when demand picks up among the downstream industries, which would accelerate sales and profitability growth.

	2010A	2011A	2012F	2013F	2014F
Sales (W bn)	51	59	60	79	91
OP (W bn)	13	15	14	20	23
EBT (W bn)	13	16	14	20	23
NP (W bn)	10	12	12	16	19
EBITDA (W bn)	15	19	19	25	28
Net debt (W bn)	(8)	(7)	(15)	(20)	(23)
OP margin (%)	24.5	26.0	23.8	25.5	25.6
ROE (%)	19.7	17.9	15.0	18.1	18.0
Dividend yield (%)	0.7	1.3	1.7	1.7	1.7
EPS (KRW)	904	1,037	997	1,384	1,608
chg. (% YoY)	79.4	14.7	(3.9)	38.9	16.2
BPS (KRW)	5,312	6,249	7,046	8,230	9,639
DPS (KRW)	100	200	200	200	200
PE (x)	14.8	14.8	12.0	8.6	7.4
PB (x)	2.5	2.4	1.7	1.5	1.2
EV/EBITDA (x)	9.9	9.1	6.5	4.8	4.1

## Company report focus

### What is the report about?

- Initiate coverage with BUY and TP W16,000
- Analyze the downstream cycle and predict a recovery phase
- Look at sales drivers and raw materials sourcing abilities
- Examine sales growth potential based on demand recovery and greater utilization

### Key assumptions and valuation

- Downstream industries (semiconductor wafers, PV wafer ingots and LED equipment) to remain sluggish in 2012 but enter a recovery phase in 2013
- Target multiple is the median of TCK's optimal PB band (1.2-3.4x)

### Sensitivity & scenario analysis

- 10% increase in utilization lifts EPS by 15.7%
- 10% rise in KRW/USD lifts EPS by 2.7%

#### EPS sensitivity to utilization and FX changes (KRW, x)

Chg. in utilization (%p)	Utilization				
	(10)	(5)	0	5	10
EPS	944	996	997	1,101	1,153
% chg.	(5.4)	(0.1)	0.0	10.4	15.7
Chg. in KRW/USD (%)	KRW/USD				
	(10)	(5)	0	5	10
EPS	970	983	997	1,011	1,024
% chg.	(2.7)	(1.4)	0.0	1.4	2.7

Source: Korea Investment & Securities

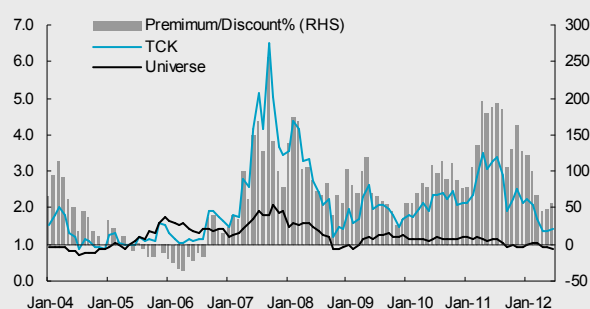
### Risks/opportunities

- Decline in semiconductor capex
- Material cost changes on KRW/JPY fluctuations
- Disruption to raw material supplies
- Light trading liquidity

### Company highlights

- 1) Past valuation
  - Traded at a market premium during 2007-2008 on expectations for the PV business
  - Relatively high ROE (avg. 19%) maintained during 2004-2011

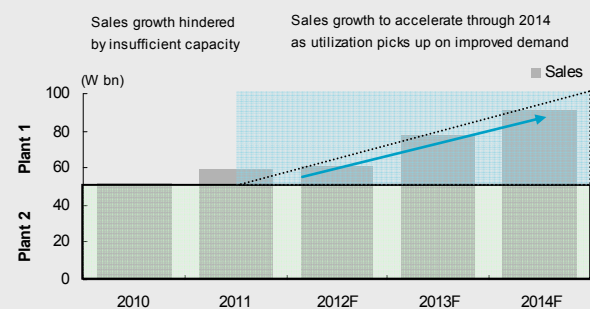
#### Relative PB



Source: Korea Investment & Securities

- 2) Constant replacement demand, reliable sourcing of raw materials and sufficient capacity
  - Downstream industries to recover in 2013 after passing a trough in 2012
  - Replacement demand and raw materials sourcing is stable
  - Sufficient capacity to speed up future sales growth

#### Relative PB



Source: Korea Investment & Securities

### Peer comparison

- See peer valuation table on page 3

# Contents

I. Valuation .....	2
1. Initiate coverage with BUY and TP W16,000	
II. Company overview and earnings outlook .....	4
1. High-purity graphite parts maker	
2. 2013F sales to jump 30% YoY to W78.7bn	
III. Investment points .....	6
1. Downstream industries set to recover in 2013	
2. Steady replacement demand and stable raw materials supply	
3. Sufficient capacity to accelerate future sales growth	
IV. Risks .....	14
1. Recovery delays among downstream industries	
2. Material cost changes on KRW/JPY fluctuations	
3. Disruption to raw material supplies	
4. Light trading liquidity	
Appendix. Glossary .....	15

## I. Valuation

### 1. Initiate coverage with BUY and TP W16,000

**Target PB 2.3x is the median of TCK's optimal PB band**

We initiate coverage of TCK with BUY and TP W16,000 at PB 2.3x (2012F BPS W7,046). Our target multiple is the median of TCK's optimal PB band (1.2-3.4x). We recommend BUY on the following. 1) We believe TCK's downstream industries will enter a full-fledged recovery phase starting from 2013. 2) TCK can generate stable sales and OP on constant replacement demand for their products and stable raw materials sourcing. 3) TCK will lift utilization when demand picks up among the downstream industries, which would accelerate sales and profitability growth.

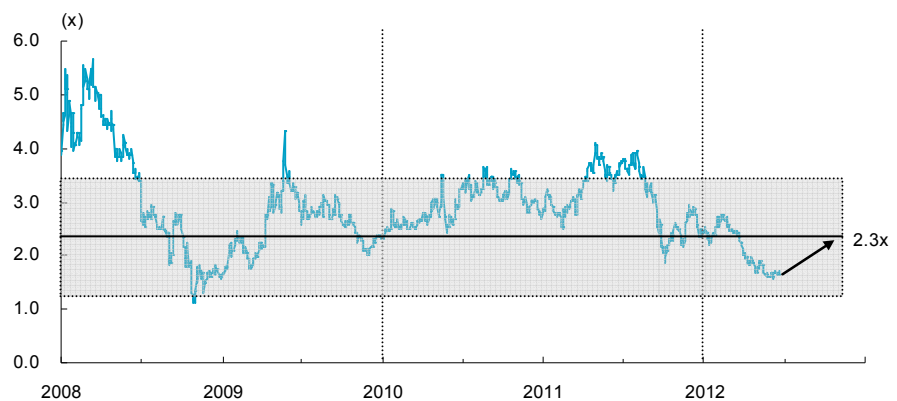
#### TP at 2012F PB 2.3x

(KRW, x)

		BPS (2012F)		Median of TCK's optimal PB band	
TP	=	7,046	x	2.3x	= 16,206

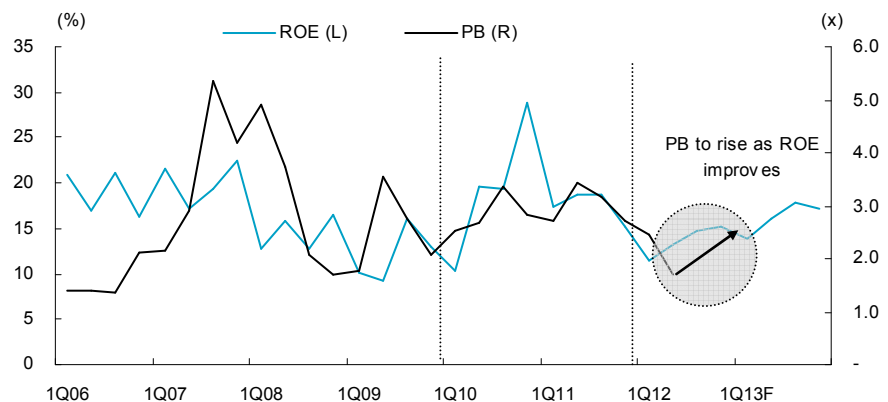
Source: Company data, Korea Investment &amp; Securities

#### Target PB in the optimal range of TCK's past band



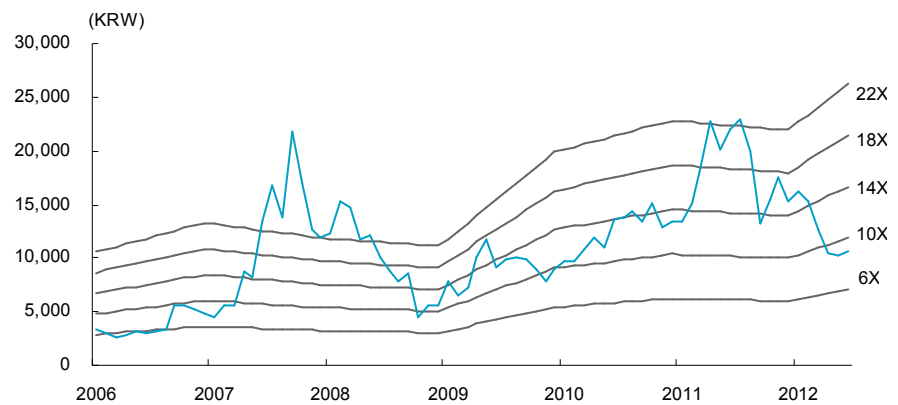
Source: Company data, Korea Investment &amp; Securities

#### PB to rise as ROE improves



Source: Company data, Korea Investment &amp; Securities

## PE band



Source: Company data, Korea Investment &amp; Securities

## Peer valuation comparison

(USD mn, x, %)

Company	Market cap	FY	PE (x)	PB (x)	EV/EBITDA (x)	EPS growth (%)	ROE (%)
SGL Carbon SE	2,676	2011A	25.9	1.9	10.1	31.0	7.7
		2012F	25.0	1.8	10.1	3.5	7.8
		2013F	18.0	1.7	8.5	38.8	10.6
Toyo Tanso	632	2011A	13.9	1.0	4.8	188.9	7.6
		2012F	12.3	0.9	3.9	13.0	7.7
		2013F	12.3	0.9	3.4	(0.0)	10.2
Nippon Carbon	286	2011A	9.5	0.7	3.7	49.4	6.7
		2012F	9.4	0.7	4.0	1.2	7.7
		2013F	7.0	0.6	3.1	34.2	10.6
TCK	114	2011A	14.8	2.4	9.1	14.7	17.9
		2012F	10.7	1.5	5.7	(3.9)	15.0
		2013F	7.7	1.3	4.2	38.9	18.1

Source: Company data, Bloomberg, Korea Investment &amp; Securities

## II. Company overview and earnings outlook

### 1. High-purity graphite parts maker

**Major products:**  
**graphite parts used in**  
**hot zone of growers and**  
**in LED equipment;**  
**Expanding into SiC**  
**coated products**

TCK is a graphite parts maker established in a joint venture between Tokai Carbon (35.4%) in Japan and KC Tech (28.3%) and Seunglim Carbon Metal in Korea. TCK provides 1) high-purity graphite parts used in the hot zone of semiconductor and photovoltaic (PV) silicon ingot growers, 2) susceptor and wafer carriers for MOCVD equipment used to make LED chips and 3) other CVD silicon carbide (SiC) coated products. Major customers include LG Siltron, Nexolon, REC Wafer, Woongjin Energy, MEMC Korea, Silflex and Aixtron.



Source: Company data, Korea Investment &amp; Securities

Source: Company data, Korea Investment &amp; Securities

Source: Company data, Korea Investment &amp; Securities

### Company snapshot

<b>Established</b>	Aug 7, 1996
<b>CEO</b>	Yoshinari Kudo (board chairman, co-CEO), Jeong-hoon Lee (president, co-CEO)
<b>Ownership</b>	Tokai Carbon (35.4%), KC Tech (28.3%)
<b>Major products</b>	Graphite parts used in semiconductor, PV and LED technology
<b>Main customers</b>	LG Siltron, Nexolon, REC Wafer, Woongjin Energy, MEMC Korea, Aixtron etc.
<b>Sales breakdown by division</b>	2012: semiconductor graphite (29%), PV graphite (35%), LED graphite (23%)
<b>Domestic market share by product</b>	2012: semiconductor graphite (61%), PV graphite (42%), LED graphite (30%)

Source: Company data, Korea Investment &amp; Securities

### Semiconductor and PV graphite to generate 64% of sales in 2012

In 2011, the sales mix comprised 63% graphite for semiconductors and PV products, 22% graphite for LED equipment and 15% other coated parts. We forecast the respective sales breakdown will be 64%, 23% and 13% in 2012F.

### Major product descriptions

Product category	Product description	Replacement cycle	Main customers
Hot zone parts	High-purity graphite parts used in the casting crucibles (hot zone) of semiconductor and PV wafer ingot growers	3-6 months	LG Siltron, Nexolon, REC wafer, Woongjin Energy, MEMC Korea, etc.
LED equipment parts	Graphite parts for MOCVD equipment that grow epitaxial layers on wafers during the LED manufacturing process	2-3 months	Aixtron, etc.
CVD SiC-coated parts	Graphite products with SiC coatings (CVD process) that lowers impurity level and prevents out-gassing of the graphite and formation of graphite particles	2-6 months	Semiconductor equipment and semiconductor makers

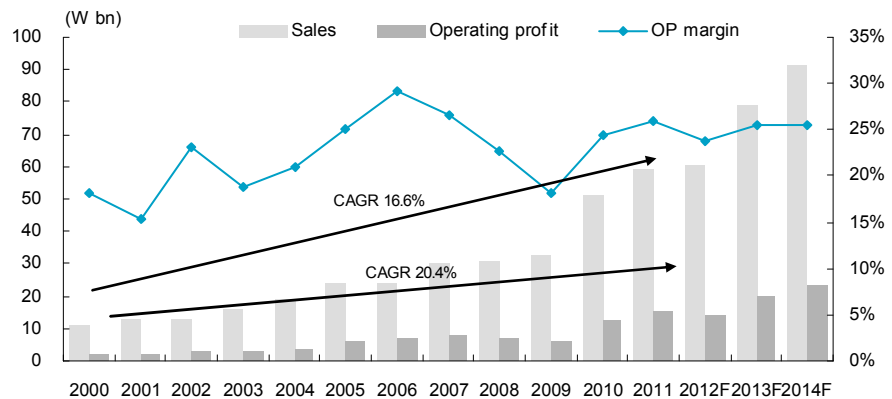
Source: Company data, Korea Investment &amp; Securities

## 2. 2013F sales to jump 30% YoY to W78.7bn

**Steady top-line growth  
and big margins should  
continue**

TCK has boasted steady top-line growth and big margins with sales and OP CAGR of 16.6% and 20.4%, respectively, during 2000-2011. But in 2012F, sales should increase only slightly to W60.4bn (+1.5% YoY) while OP and NP shrink to W14.4bn (-6.9% YoY) and W11.6bn (-3.9% YoY), respectively, due to the sluggish downstream conditions. In 2013F, we set sales at W78.7bn (+30.3% YoY), OP at W20.1bn (+39.5% YoY) and NP at W16.2bn (+38.9% YoY), backed by the full-fledged recovery of the downstream businesses and rising utilization at the no. 2 plant.

### Steady top-line growth and big margins for the past decade



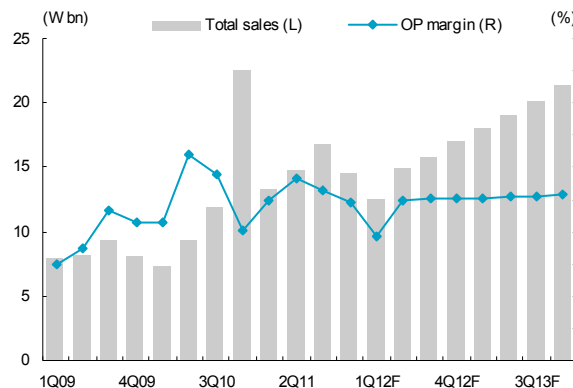
Source: Company data, Korea Investment & Securities

### Quarterly and yearly earnings summary

	1Q11	2Q11	3Q11	4Q11	1Q12	2Q12F	3Q12F	4Q12F	2011	2012F	2013F
Sales	13.3	14.8	16.8	14.6	12.5	14.9	15.9	17.0	59.4	60.4	78.7
Semiconductor graphite	3.6	2.9	4.0	3.9	3.4	4.2	4.7	5.1	14.4	17.5	25.6
PV graphite	4.3	6.5	6.7	5.5	4.3	5.2	5.6	6.0	23.0	21.1	28.9
LED graphite	3.8	3.5	3.4	3.0	3.0	2.8	3.4	3.7	13.7	13.0	18.6
Others	1.9	1.9	3.1	2.2	1.9	2.1	1.9	1.8	9.1	7.7	4.1
Operating profit	3.3	4.2	4.4	3.6	2.4	3.7	4.0	4.3	15.4	14.4	20.1
OP margin (%)	24.8%	28.2%	26.3%	24.4%	19.3%	24.8%	25.0%	25.1%	26.0%	23.8%	25.5%
Net profit	3.0	3.0	3.3	2.8	2.1	2.9	3.2	3.4	12.1	11.6	16.2
NP margin (%)	22.6%	20.2%	19.7%	19.3%	16.4%	19.8%	20.0%	20.2%	20.4%	19.3%	20.5%

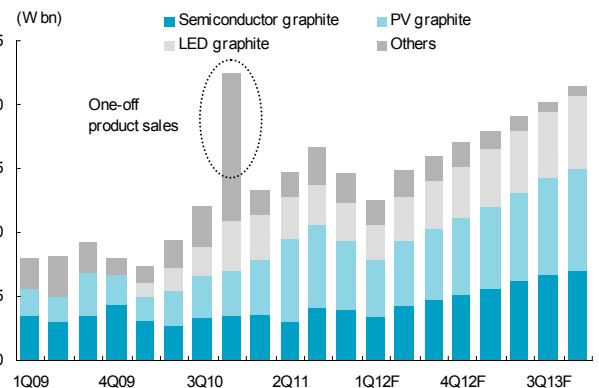
Note: K-IFRS (individual)  
Source: Korea Investment & Securities

### Quarterly sales and OP



Source: Company data, Korea Investment & Securities

### Sales breakdown by division



Source: Company data, Korea Investment & Securities

### III. Investment points

#### 1. Downstream industries set to recover in 2013

##### 1) Semiconductor silicon wafers: Demand to recover on aggressive capex at customers

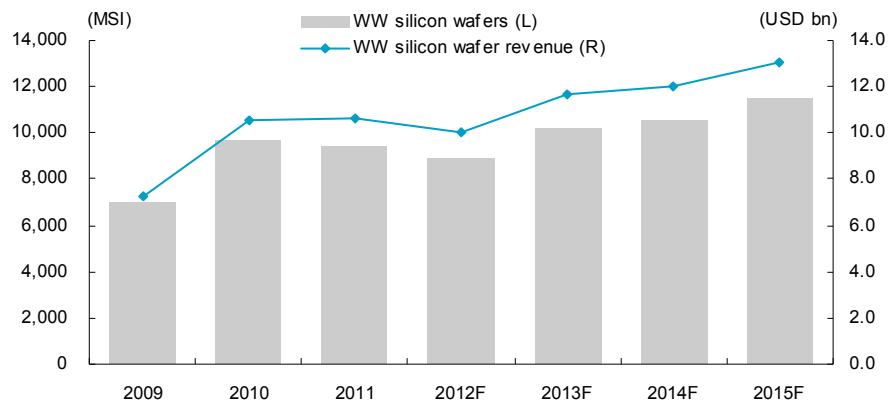
**Demand for silicon wafers to post 2012-2015F CAGR 8.8%**

**Growth drivers: 1) semiconductor capex, 2) wafer inventory rundown, 3) brisk mobile device sales and 4) foundry expansion**

The demand for silicon wafers used for semiconductor production is forecast to see a CAGR of 8.8% during 2012-2015F. In 2010, the silicon wafer market grew 40% YoY on the economic recovery and the supply of polysilicon used for semiconductors also expanded. But in 2011, silicon wafer usage shrank 3.5% YoY due to economic uncertainties and sluggish IT demand.

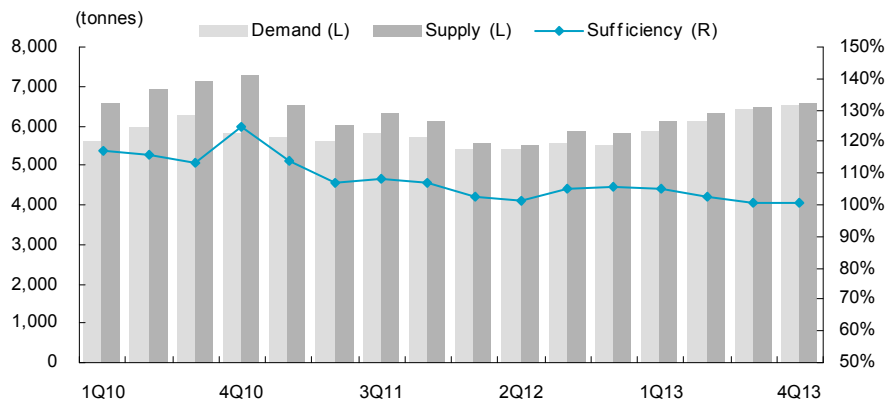
Although IT demand remains weak, we expect silicon wafer usage to grow 14% YoY in 2013F as oversupply eases. 1) Samsung Electronics (Samsung) and SK Hynix – the largest customers for silicon wafers – should aggressively expand their capacity. 2) The inventory correction of silicon wafers should wind down at end-1H12. 3) Silicon wafer usage for non-memory applications should increase on strong mobile device sales. 4) Foundry firms such as TSMC and GlobalFoundries are also active to spend and expand capacity.

##### Semiconductor silicon wafer market forecast



Note: MSI (million square inches)  
Source: Gartner, Korea Investment & Securities

##### Semiconductor polysilicon supply-demand outlook



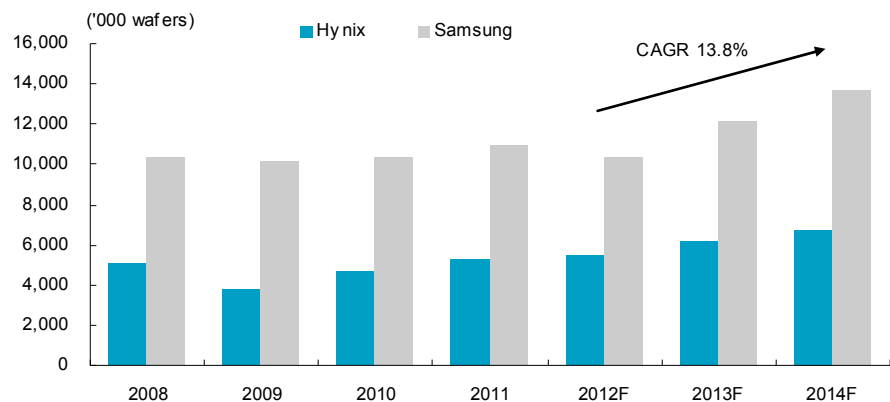
Source: MIP, Korea Investment & Securities



**Capacity expansion at Samsung and Hynix to boost silicon wafer demand**

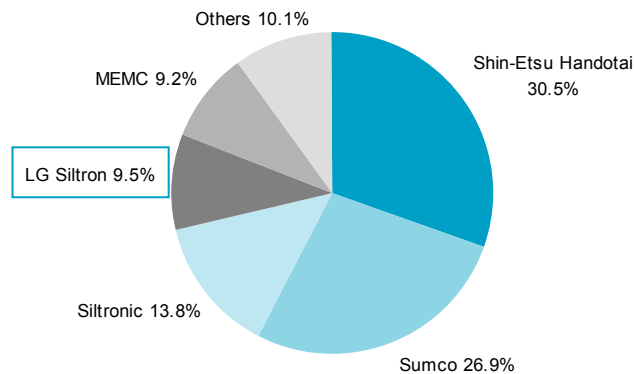
Domestic silicon wafer demand is mounting on capex by Samsung and SK Hynix. Samsung's semiconductor capacity, mainly for system LSI, is forecast to post CAGR 15.2% during 2012-2014F and SK Hynix's, mainly for NAND flash, should also experience CAGR 11.1% during the same period. Of note, LG Siltron, the domestic leader and the world's fourth-largest wafer supplier measured by market share, would benefit from aggressive capacity expansion by Samsung and SK Hynix (combined CAGR 13.8% during 2012-2014F). Accordingly, TCK, which supplies high-purity graphite products to LG Siltron, would also enjoy bigger sales.

**Samsung and SK Hynix capacity and forecast**



Note: 12-inch wafer equiv.  
Source: Korea Investment & Securities

**Semiconductor silicon wafer market share**



Note: As of 2011  
Source: Gartner, Korea Investment & Securities

***Despite ongoing oversupply, demand in 2013 should beat expectations***

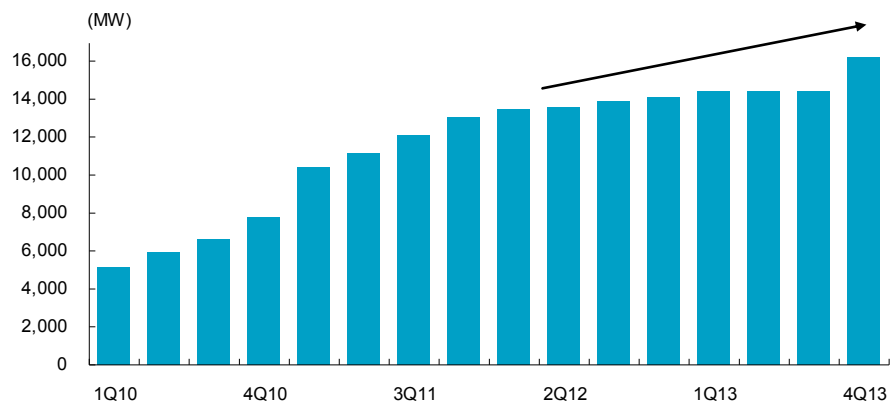
***Nexolon and Woongjin Energy to resume capacity expansion as demand recovers***

## 2) Solar PV ingots: Demand to recover although oversupply remains

Although solar PV demand should remain weak in 2012 due to oversupply, we expect demand to pick up from 2013. New solar PV installations for 2011 were concentrated in 2H, which has kept solar PV module inventories within an adequate range of two-three months. From 2013, new installation demand should emerge and drive up the solar PV makers' utilization rates and shipments.

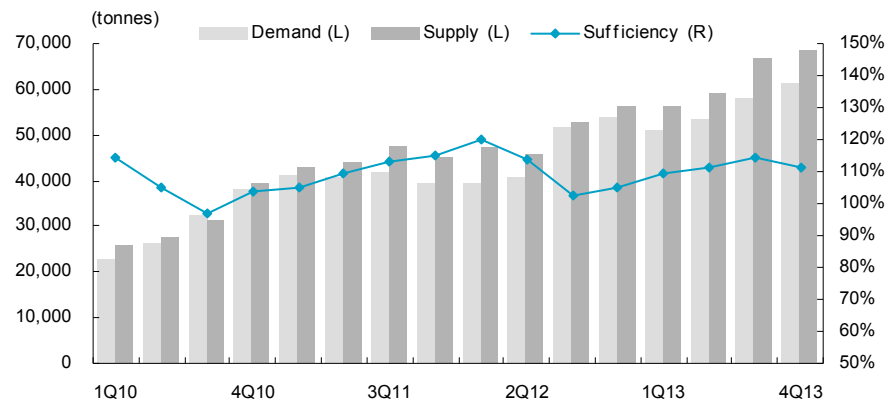
Nexolon and Woongjin Energy are two of the top players in the domestic solar PV market and TCK sells them graphite products used for solar PV silicon wafers. Although the two solar PV firms have restrained from capacity expansion until now, we expect them to resume investment when module demand picks up from 2013.

### Solar PV silicon wafer capacity forecast



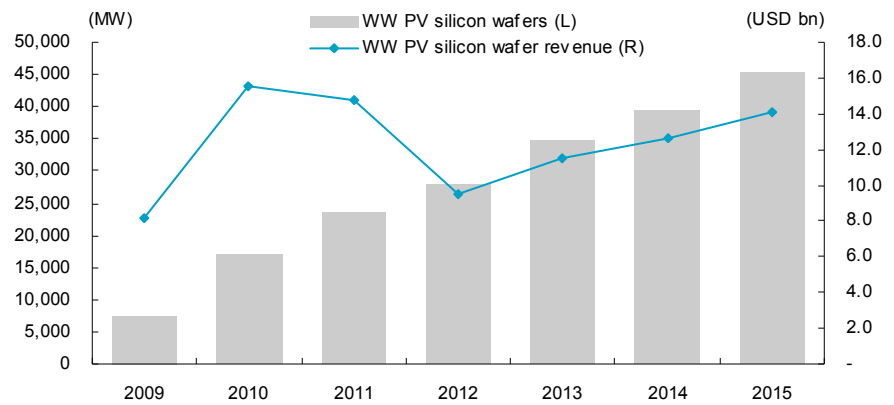
Note: MW (megawatts)  
Source: MIP, Korea Investment & Securities

### Solar PV polysilicon supply-demand outlook



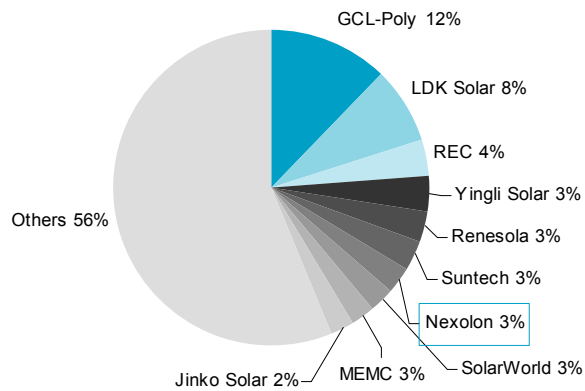
Source: MIP, Korea Investment & Securities

### Solar PV silicon wafer market forecast



Note: MW (megawatts)  
Source: MIP, Korea Investment & Securities

### Solar PV silicon wafer market share



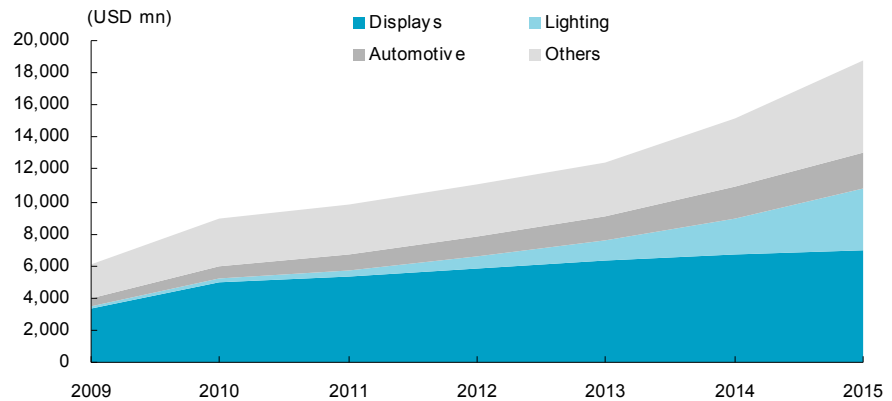
Note: As of 2011; Wafer capacity basis  
Source: MIP, Korea Investment & Securities

**LED market has been in  
a state of oversupply  
since 4Q10**

### 3) LED equipment: Expect demand recovery for MOCVD replacement parts despite oversupply issues

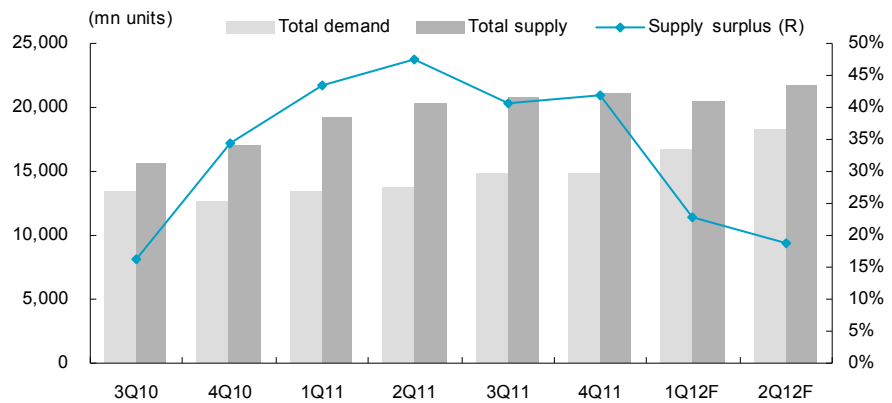
The LED market has been in oversupply status of more than 20% since 4Q10 as 1) there were steady deliveries of MOCVD equipment ordered in 2010, 2) price competition among LED makers heightened, 3) there were fewer LED shipments than TV shipments and 4) LED lighting has stayed pricier than incandescent and CFL lighting.

#### LED market forecast



Source: Gartner

#### LED oversupply

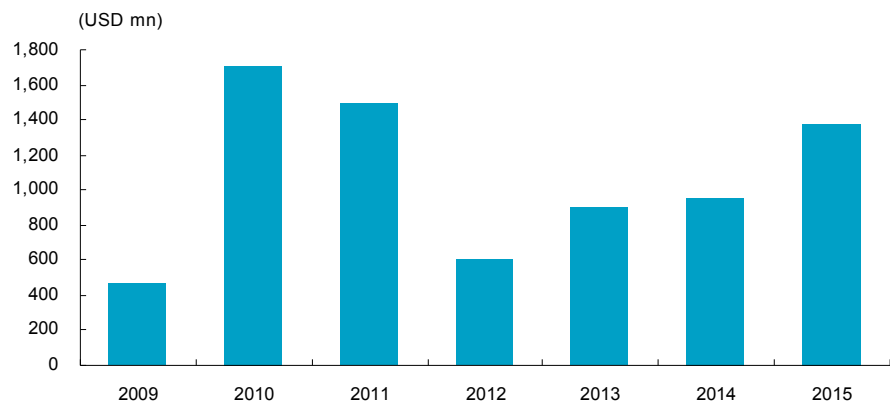


Source: DisplaySearch, Korea Investment & Securities

**Despite lower MOCVD orders, TCK's products driven by replacement demand**

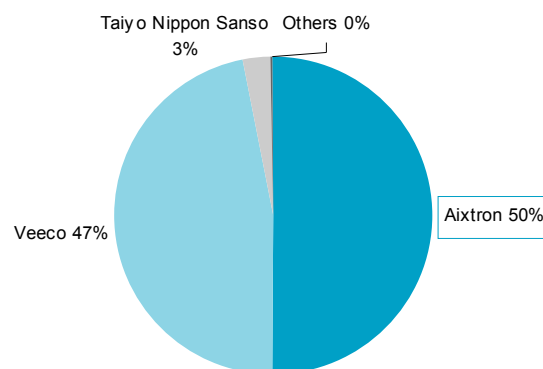
TCK manufactures LED susceptors and wafer carriers that are one of the main components of MOCVD equipment that grow epitaxial layers on wafers used during the LED manufacturing process. Of note, TCK supplies LED susceptors and wafer carriers to the world's no. 1 market share holder, Aixtron. Although worldwide orders for MOCVD equipment have contracted since 2011, TCK could enjoy stable sales as LED susceptors and wafer carriers need to be replaced every two or three months. On top of the short replacement cycle, we also expect MOCVD equipment orders to revitalize in 2013 and add to TCK's sales. Lastly, given TCK's track record of selling to Aixtron, we could expect TCK to win orders from Veeco – the no. 2 market share holder behind Aixtron – in the future.

#### MOCVD equipment sales



Source: Gartner

#### MOCVD equipment players



Note: 2011 sales basis  
Source: Aixtron, Korea Investment & Securities

## 2. Steady replacement demand and stable raw materials supply

**90% of sales from replacements with two to six-month cycles**

For TCK, 90% of sales come from expendable goods that require constant replacement. Replacement cycles are three to six months for graphite products for semiconductors and PV energy and two to three months for products for LED. With such short replacement cycles, TCK's sales and OP are stable. Moreover, the company enjoys steady sales from replacements as it has secured big graphite market shares: 60% for semiconductor-purpose, 42% for PV energy and 30% for LED.



Source: Company data, Korea Investment &amp; Securities

Source: Company data, Korea Investment &amp; Securities

Source: Company data, Korea Investment &amp; Securities

### Major product descriptions

Product category	Product description	Replacement cycle	Main customers
Hot zone parts	High-purity graphite parts used in the casting crucibles (hot zone) of semiconductor and PV wafer ingot growers	3-6 months	LG Siltron, Nexolon, REC wafer, Woongjin Energy, MEMC Korea, etc.
LED equipment parts	Graphite parts for MOCVD equipment that grow epitaxial layers on wafers during the LED manufacturing process	2-3 months	Aixtron, etc.
CVD SiC-coated parts	Graphite products with SiC coatings (CVD process) that lowers impurity level and prevents out-gassing of the graphite and formation of graphite particles	2-6 months	Semiconductor equipment and semiconductor makers

Source: Company data, Korea Investment &amp; Securities

**TCK sources 100% of raw materials from its parent company**

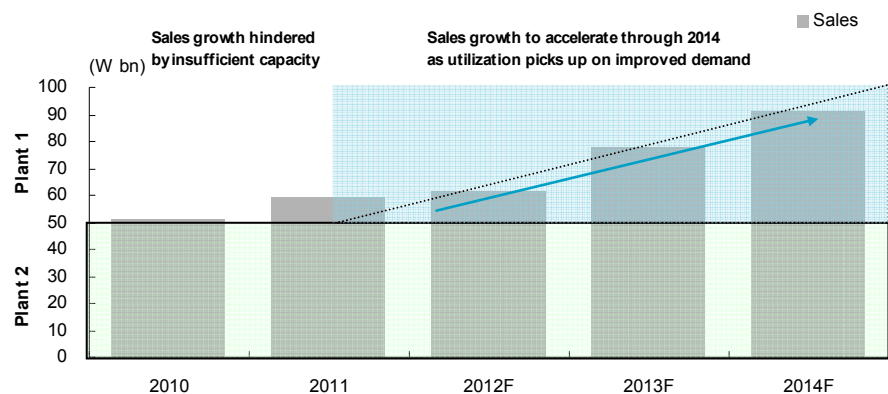
TCK receives 100% of raw materials from its parent company Tokai Carbon. Being at the top of the priority list, it is unlikely to experience production disruptions due to a raw materials shortage. The global raw graphite market has four leaders: Japan's Toyo Tanso, Tokai Carbon, Nippon Carbon and Germany's SGL Carbon SE. Thus, a short supply of raw graphite could lead to production disruptions and cost hikes at graphite product makers. It is essential for TCK to secure stable graphite raw materials supply as the cost for raw graphite accounts for 39% of the company's sales (2011 basis).

### 3. Sufficient capacity to accelerate future sales growth

**Plant no. 2 to provide sufficient capacity for future sales growth**

The high-purity graphite processing business has a high entry barrier as it requires hefty investment for equipment. TCK invested ₩30bn to build its no. 2 plant in Ansong, Gyeonggi province. The construction began in Jul 2010 and was completed in Apr 2011. In 2012, the company plans to add new equipment. As TCK has secured sufficient capacity, we expect sales to accelerate and earnings to improve in 2013 as capacity utilization picks up with demand recovering among downstream industries.

#### Capacity expansion at plant no. 2 to accelerate future sales growth



Source: Korea Investment & Securities

#### EPS sensitivity to changes in 2012F utilization

(KRW, %)

Chg. in utilization	Changes in 2012F utilization								
	(20.0)	(15.0)	(10.0)	(5.0)	0.0	5.0	10.0	15.0	20.0
EPS	839	891	944	996	997	1,101	1,153	1,206	1,258
Chg. in EPS	(15.9)	(10.6)	(5.4)	(0.1)	0.0	10.4	15.7	20.9	26.2

Source: Korea Investment & Securities

## IV. Risks

### 1. Recovery delays among downstream industries

#### 1) Decline in semiconductor capex

Semiconductor industry capex could shrink given 1) weak funding ability of the chip makers and 2) widening gap (tech migration and cost competitiveness) between 1<sup>st</sup>-tier and 2<sup>nd</sup>-tier chip makers.

#### 2) Faster-than-expected reduction in government solar PV subsidies

Government solar PV subsidies (feed-in tariff) declining at a faster pace than cost reductions for PV installations is a risk factor. In addition, solar companies in Korea will be affected by the government's ongoing implementation of the RPS (renewable portfolio standard) program and its success.

#### 3) Delays in emergence of the LED lighting industry

LED lighting continuing to receive a pricing premium over incandescent and CFL lighting is a risk factor. LED lighting currently has a pricing premium of 24x over incandescent lighting and 4.6x over CFL lighting.

### 2. Material cost changes on KRW/JPY fluctuations

TCK procures all carbon block materials from its parent company (Tokai Carbon) and negotiates the purchase price with Tokai Carbon once a year. As such, there is less risk of material cost changes associated with KRW/JPY volatility throughout the year.

### 3. Disruption to raw material supplies

Tokai Carbon has a vast network of laboratories, branches and plants throughout Japan. As such, disruption to raw material supplies arising from natural disasters (e.g., earthquake) could be a risk factor. During the Japan earthquake in Mar 2011, its Ishinomaki plant (makes carbon black, a key agent for printing inks) suffered extensive damage. However, plants in other areas were not affected. Hence, there were no disruptions of raw material supplies to TCK.

### 4. Light trading liquidity

Among 11,675,000 outstanding shares, Tokai Carbon holds 4,133,000 (35.4%) and KC Tech holds 3,306,000 (28.3%), which leaves 4,237,000 shares (36.3%) as free float. This light trading liquidity can lead to significant share price volatility.



## Appendix. Glossary

Acronyms & abbreviations	Full
CFL	compact fluorescent lamp
CVD	chemical vapor deposition
MOCVD	metal organic chemical vapor deposition
SiC	silicon carbide

**Balance sheet**

FY-ending Dec. (W bn)	2010A	2011A	2012F	2013F	2014F
Current assets	40	34	43	56	66
Cash & cash equivalents	3	7	15	20	23
Accounts & other receivables	22	12	13	16	19
Inventory	10	15	15	19	24
Non-current assets	43	54	54	55	56
Investment assets	2	2	2	3	3
Tangible assets	40	51	51	51	51
Intangible assets	1	1	1	2	2
Total assets	83	88	97	111	122
Current liabilities	18	12	11	10	5
Accounts & other payables	16	9	24	31	36
ST debt & bonds	0	0	0	0	0
Current portion of LT debt	0	0	0	0	0
Non-current liabilities	3	3	3	4	5
Debentures	0	0	0	0	0
LT debt & financial liabilities	0	0	0	0	0
Total liabilities	21	15	14	14	9
Paid-in capital	6	6	6	6	6
Capital surplus	6	6	6	6	6
Capital adjustments	0	0	0	0	0
Retained earnings	50	61	70	84	100
Shareholders' Equity	62	73	82	96	113

**Income statement**

FY-ending Dec. (W bn)	2010A	2011A	2012F	2013F	2014F
Sales	51	59	60	79	91
Gross profit	19	23	23	31	36
SG&A expenses	6	7	9	11	13
Other operating gains	(0)	(1)	0	0	0
Operating profit	13	15	14	20	23
Financial income	1	0	0	0	0
Interest income	1	0	0	0	0
Financial expenses	0	0	0	0	0
Interest expenses	0	0	0	0	0
Other non-operating profit	0	0	0	0	0
Gains (Losses) in associates, subsidiaries and JV	0	0	0	0	0
Earnings before tax	13	16	14	20	23
Income taxes	3	3	3	4	5
Net profit	10	12	12	16	19
Other comprehensive profit	0	0	0	0	0
Total comprehensive profit	10	12	12	16	19
EBITDA	15	19	19	25	28

**Cash flow**

FY-ending Dec. (W bn)	2010A	2011A	2012F	2013F	2014F
C/F from operations	8	14	15	13	11
Net profit	10	12	12	16	19
Depreciation	2	4	5	5	5
Amortization	0	0	0	0	0
Net incr. in W/C	(5)	(2)	(1)	(8)	(13)
Others	1	0	(1)	0	0
C/F from investing	(8)	(10)	(5)	(6)	(6)
Capex	(19)	(15)	(5)	(5)	(5)
Decr. in fixed assets	1	0	0	0	0
Incr. in investment	11	5	(0)	(1)	(0)
Net incr. in intangible assets	(0)	(0)	(0)	(0)	(0)
Others	(1)	0	0	0	(1)
C/F from financing	1	0	(2)	(2)	(2)
Incr. in equity	1	0	0	0	0
Incr. in debt	0	0	0	0	0
Dividends	0	0	(2)	(2)	(2)
Others	0	0	0	0	0
C/F from others	(0)	(0)	0	0	0
Increase in cash	1	4	8	4	3

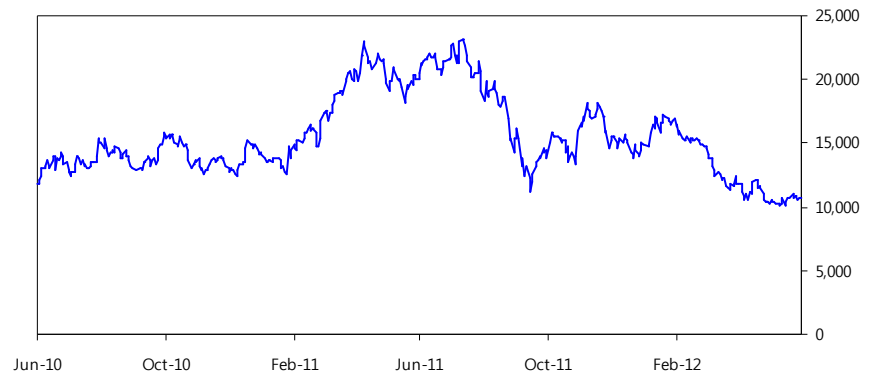
Note: K-IFRS (non-consolidated)

**Key financial data**

FY-ending Dec.	2010A	2011A	2012F	2013F	2014F
Per-share data (KRW)					
EPS	904	1,037	997	1,384	1,608
BPS	5,312	6,249	7,046	8,230	9,639
DPS	100	200	200	200	200
Growth (%)					
Sales growth	52.8	16.3	1.5	30.3	15.9
OP growth	93.0	23.4	(6.9)	39.5	16.3
NP growth	80.4	15.7	(3.9)	38.9	16.2
EPS growth	79.4	14.7	(3.9)	38.9	16.2
EBITDA growth	71.8	31.7	(1.4)	31.4	13.1
Profitability (%)					
OP margin	24.5	26.0	23.8	25.5	25.6
NP margin	20.5	20.4	19.3	20.5	20.6
EBITDA margin	28.7	32.4	31.5	31.8	31.0
ROA	16.0	14.2	12.6	15.6	16.2
ROE	19.7	17.9	15.0	18.1	18.0
Dividend yield	0.7	1.3	1.7	1.7	1.7
Stability					
Net debt (W bn)	(8)	(7)	(15)	(20)	(23)
Debt/equity ratio (%)	0.0	0.0	0.0	0.0	0.0
Valuation (x)					
PE	14.8	14.8	12.0	8.6	7.4
PB	2.5	2.4	1.7	1.5	1.2
PS	3.1	3.0	2.3	1.8	1.5
EV/EBITDA	9.9	9.1	6.5	4.8	4.1

**Changes to recommendation and price target**

Company (Code)	Date	Recommendation	Price target
Tokai Carbon Korea (064760)	06-19-12	BUY	W16,000



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