

DRIVE INNOVATION • DELIVER EXCELLENCE >



ASMI ANNUAL MEETING OF SHAREHOLDERS

Chuck del Prado, President & CEO

May 21, 2014

SAFE HARBOR STATEMENTS

Safe Harbor Statement under the U.S. Private Securities Litigation Reform Act of 1995: All matters discussed in this business and strategy update, except for any historical data, are forward-looking statements. Forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those in the forward-looking statements. These include, but are not limited to, economic conditions and trends in the semiconductor industry generally and the timing of the industry cycles specifically, currency fluctuations, corporate transactions, financing and liquidity matters, the success of restructurings, the timing of significant orders, market acceptance of new products, competitive factors, litigation involving intellectual property, shareholder and other issues, commercial and economic disruption due to natural disasters, terrorist activity, armed conflict or political instability, epidemics and other risks indicated in the Company's filings from time to time with the U.S. Securities and Exchange Commission, including, but not limited to, the Company's reports on Form 20-F and Form 6-K. The company assumes no obligation to update or revise any forward-looking statements to reflect future developments or circumstances.

OUTLINE

- › Semiconductor equipment market in 2013
- › Reduction of stake in ASMPT
- › ASMI results in 2013
- › Corporate Responsibility
- › Status ASMI
 - Results
 - Products & Business highlights
- › Market outlook and conclusions

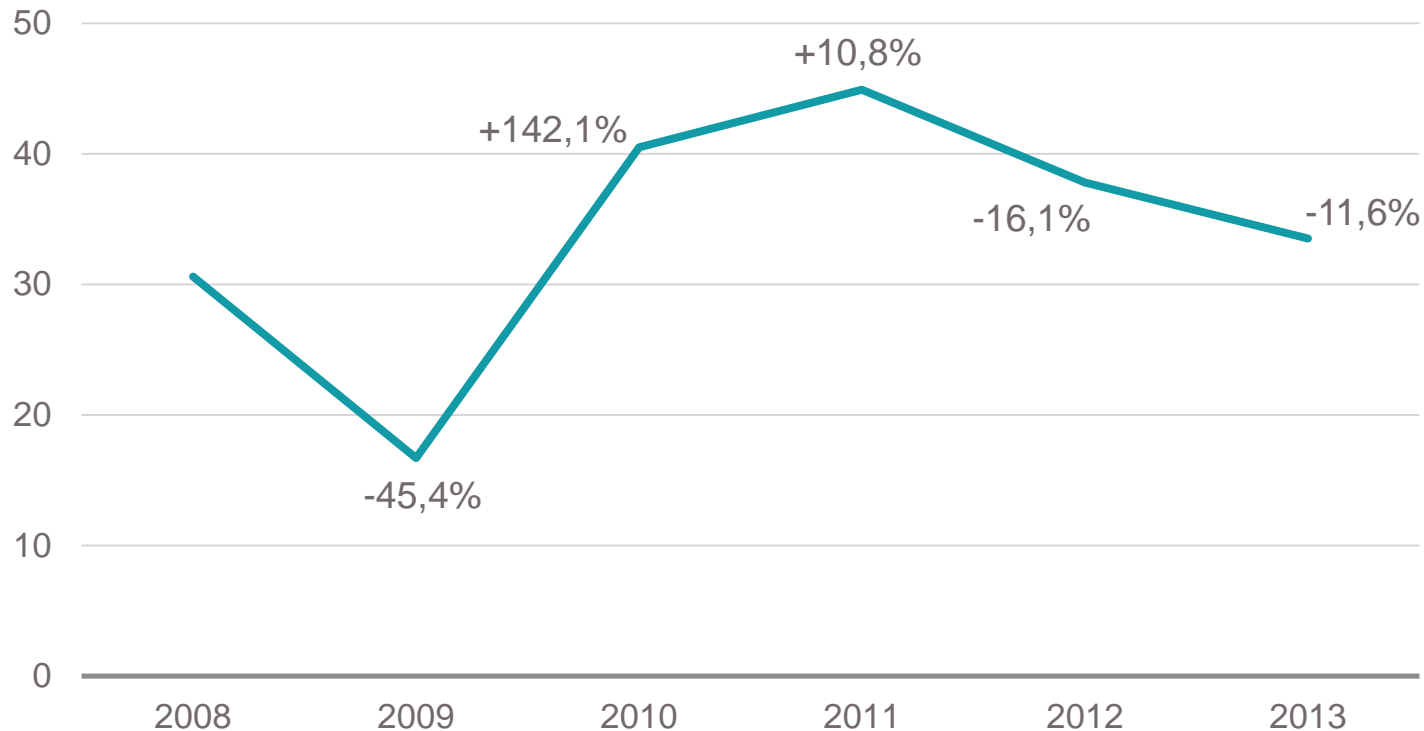
OUTLINE

- › **Semiconductor equipment market in 2013**
- › Reduction of stake in ASMPT
- › ASMI results in 2013
- › Corporate Responsibility
- › Status ASMI
 - Results
 - Products & Business highlights
- › Market outlook and conclusions

OUR INDUSTRY DECLINED FURTHER IN 2013

SEMI CAPITAL EQUIPMENT

(USD billion)



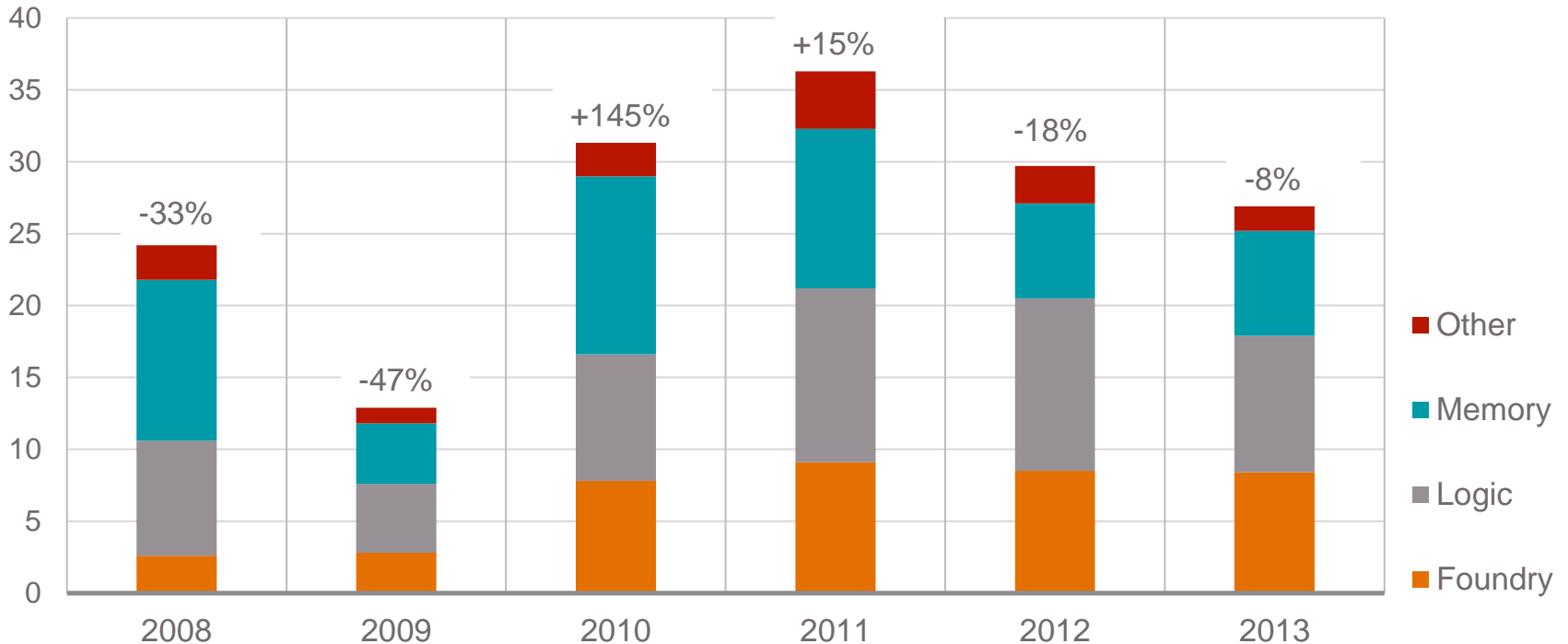
Source: Gartner, April 2014

**Semiconductor capital equipment was down in both 2012 and 2013
The market began to improve by the second half**

WAFER FAB EQUIPMENT WAS DOWN IN 2013

WAFER FAB EQUIPMENT BY DEVICE TYPE

(USD billion)



Source: Gartner, April 2014

2013 WFE spending decreased by 8%
The Logic market declined while memory increased

OUTLINE

- › Semiconductor equipment market in 2013
- › **Reduction of stake in ASMPT**
- › ASMI results in 2013
- › Corporate Responsibility
- › Status ASMI
 - Results
 - Products & Business highlights
- › Market outlook and conclusions

IMPACT 12% SALE OF ASMPT ON ASMI RESULTS

- › After the sale of 12% of the ASMPT shares on 15 March 2013, our 40% share of ASMPT net profits is included in ‘result from investments’
- › PPA regular amortization projected at €22 million for full year 2014

EUR million	Total 2013	Q1 2014
Sales ASMPT	1,055.5	234.4
Net profit ASMPT	54.5	14.3
Net profit ASMPT attributable to ASMI	20.9	5.7
Remeasurement gain, realized gain on sale of ASMPT shares, amortization and fair value adjustments	1,003.8	(5.4)
Result from investments	1,030.1	(0.3)

OUTLINE

- › Semiconductor equipment market in 2013
- › Reduction of stake in ASMPT
- › **ASMI results in 2013**
- › Corporate Responsibility
- › Status ASMI
 - Results
 - Products & Business highlights
- › Market outlook and conclusions

- › **ASMI revenues up 22% y-o-y**

- › **ASMI EBIT margin up from 0.4% in 2012 to 10.4% in 2013**

- › **Cash flow from operations of €48 million in 2013**
 - Proposal to ASMI 2014 AGM for dividend of €0.50 per share

- › **Comparable net earnings of €45 million up from €7 million in 2012**
 - Excluding €1 billion PPA gain related to sale of PT shares

NET EARNINGS – GROUP

EUR million	FULL YEAR 2012	comparable FULL YEAR 2012	FULL YEAR 2013	comparable FULL YEAR 2013	comparable Q1 2013	Q2 2013	Q3 2013	Q4 2013	Q1 2014
Front-end	370.4	370.4	452.0	452.0	80.0	128.6	116.4	126.9	150.7
Back-end	1,047.7	-	160.3	-	-	-	-	-	-
NET SALES	1,418.1	370.4	612.3	452.0	80.0	128.6	116.4	126.9	150.7
Front-end	33.6%	33.6%	39.0%	39.0%	37.7%	39.3%	39.1%	39.3%	43.7%
Back-end	30.2%	-	24.0%	-	-	-	-	-	-
GROSS MARGIN	440.4	124.5	214.6	176.2	30.2	50.5	45.6	49.9	65.9
<i>as % of sales</i>	31.1%	33.6%	35.0%	39.0%	37.7%	39.3%	39.1%	39.3%	43.7%
Selling, general and administrative	(202.1)	(64.4)	(96.3)	(70.7)	(15.3)	(18.6)	(18.2)	(18.6)	(19.2)
Research and development	(149.2)	(58.7)	(75.4)	(58.3)	(13.4)	(15.0)	(14.8)	(15.0)	(14.1)
Front-end	1.4	1.4	47.2	47.2	1.4	16.9	12.5	16.3	32.5
Back-end (100%)	87.7	-	(4.3)	-	-	-	-	-	-
EBIT (excl. restructuring/impairment)	89.2	1.4	42.9	47.2	1.4	16.9	12.5	16.3	32.5
<i>as % of sales</i>	6.3%	0.4%	7.0%	10.4%	1.8%	13.1%	10.8%	12.9%	21.6%
Restructuring	(0.9)	(0.9)	(2.5)	(2.5)	(0.3)	(0.7)	(1.0)	(0.5)	-
Front-end	(29.1)	(29.1)	24.6	24.6	3.1	8.1	5.6	7.8	26.8
Back-end (ASMI interest)	36.3	36.3	20.9	20.9	(0.5)	9.2	10.8	1.5	5.7
PPA	-	-	1,003.8	1,003.8	1,407.5	(40.7)	(17.2)	(345.8)	(5.4)
NET RESULT	7.1	7.1	1,049.3	1,049.3	1,410.1	(23.4)	(0.9)	(336.5)	27.1

› Financials based on US GAAP

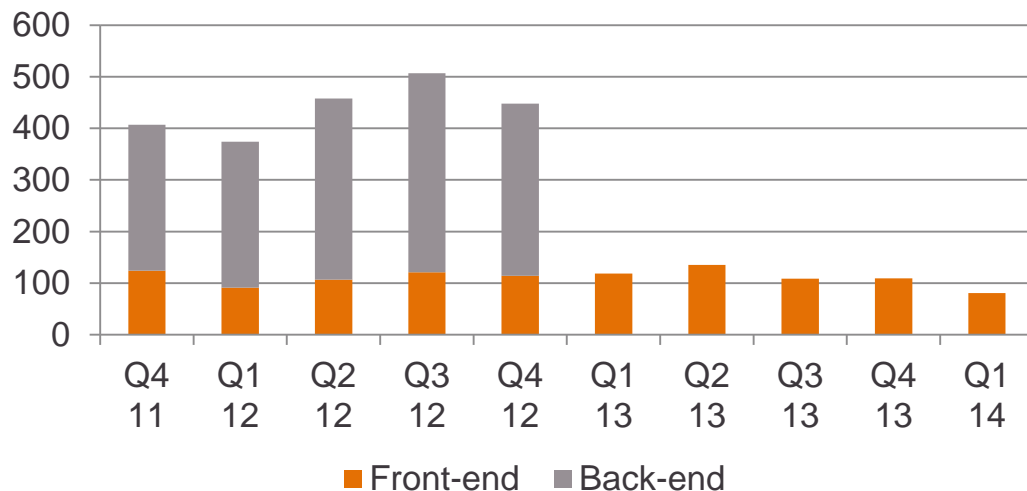
BALANCE SHEET – GROUP

EUR million	DEC 2012	comparable DEC 2012	MAR 2013	JUN 2013	SEP 2013	DEC 2013	MAR 2014
Cash and cash equivalents	291	145	565	535	304	312	371
Other current assets	818	205	208	226	202	206	206
Property, plant and equipment, net	275	64	61	55	51	57	58
Goodwill, net	52	12	12	11	11	11	11
Other Assets	64	408	1,381	1,419	1,367	965	975
TOTAL ASSETS	1,500	833	2,226	2,247	1,935	1,551	1,621
ST debt (incl current LT debt)	68	-	-	-	-	-	-
Other current liabilities	350	88	87	92	94	102	134
Long-term debt & Convertible subordinated debt	13	-	-	-	-	-	-
Other long term liabilities	19	4	3	3	3	3	3
TOTAL LIABILITIES	450	92	90	95	97	104	136
Total Shareholders' Equity	742	742	2,136	2,152	1,838	1,447	1,485
Non-controlling interest	308	-	-	-	-	-	-
TOTAL LIABILITIES & EQUITY	1,500	833	2,226	2,247	1,935	1,551	1,621

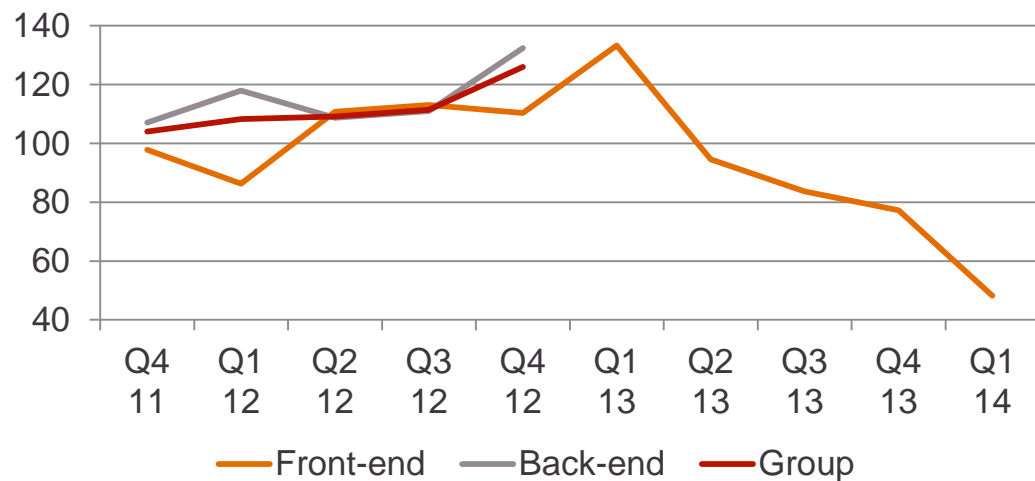
> Financials based on US GAAP

WORKING CAPITAL – GROUP

VALUE (EUR MILLION)



DAYS

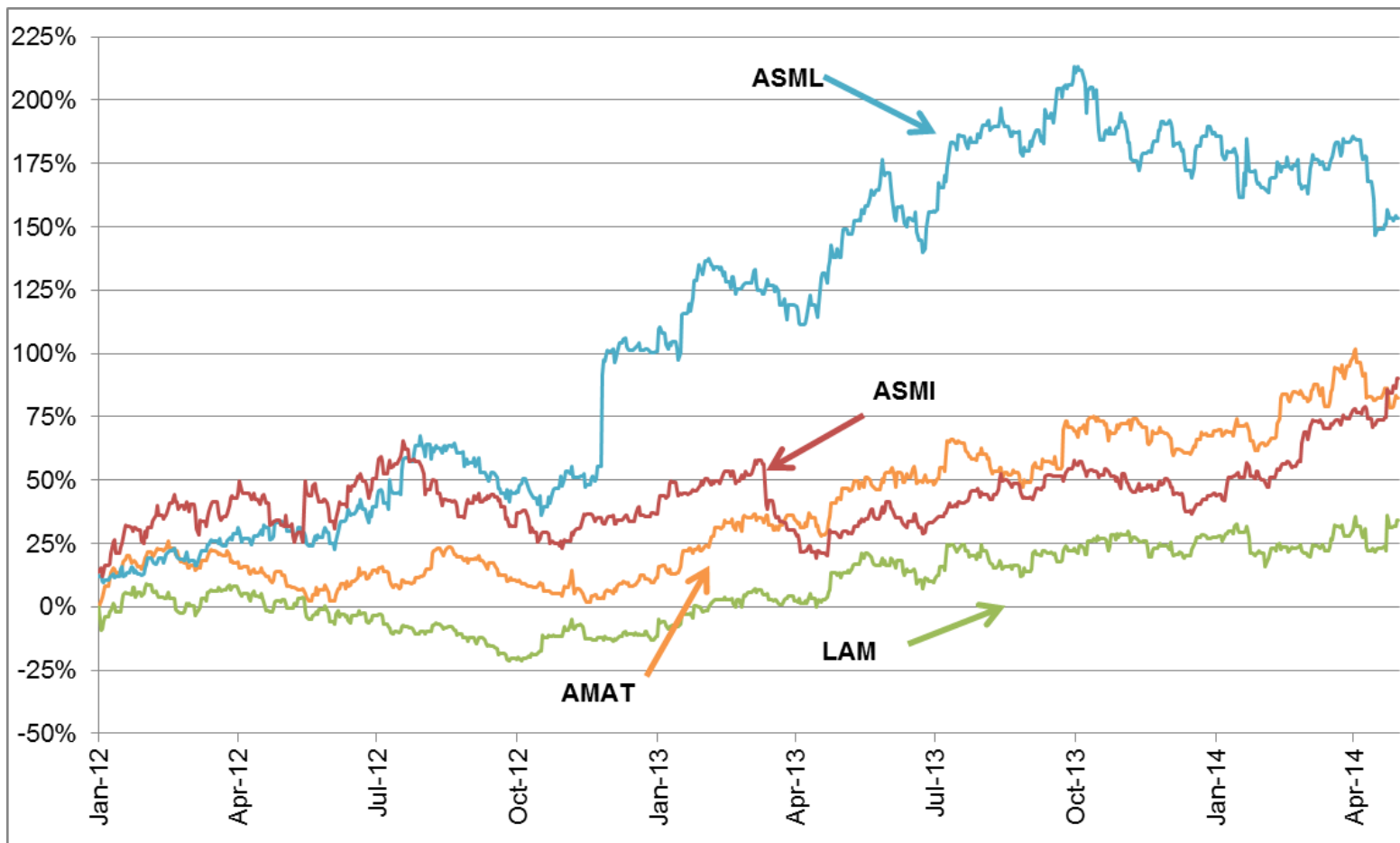


CASH FLOW – GROUP

EUR million	FULL YEAR	comparable	FULL YEAR	comparable	comparable				
	2012	FULL YEAR 2012	2013	FULL YEAR 2013	Q1 2013	Q2 2013	Q3 2013	Q4 2013	Q1 2014
Net result	40.4	7.1	1,049.3	1,049.3	1,410.2	(23.4)	(0.9)	(336.6)	27.1
Depreciation	56.9	18.8	28.5	20.7	4.8	5.1	5.1	5.7	5.1
Working Capital	(60.8)	(3.9)	(9.9)	(8.7)	(7.6)	(16.8)	21.8	(6.1)	27.1
Restructuring & impairments	0.1	-	(1,007.2)	(1,007.2)	(1,410.9)	40.7	17.2	345.8	-
Associates	0.8	(35.5)	(23.7)	(23.7)	(2.2)	(9.2)	(10.8)	(1.5)	(0.3)
Others	5.1	14.0	11.6	17.2	6.3	4.2	2.0	4.7	3.6
Net cash from operating activities	42.5	0.5	48.5	47.6	0.6	0.6	34.4	12.0	62.6
Net cash from investing activities	(71.9)	(23.7)	284.7	407.2	414.4	0.1	(0.4)	(6.9)	(4.0)
Net cash from financing activities	(73.5)	(63.4)	(307.1)	(285.1)	1.0	(26.9)	(263.9)	4.7	0.7
Exchange rate effects	3.1	3.9	(4.2)	(2.4)	3.5	(3.0)	(1.9)	(1.0)	(0.9)
Net increase (decrease) in cash and cash equivalents	(99.8)	(82.7)	21.9	167.3	419.5	(29.2)	(231.8)	8.8	58.4

› Financials based on US GAAP

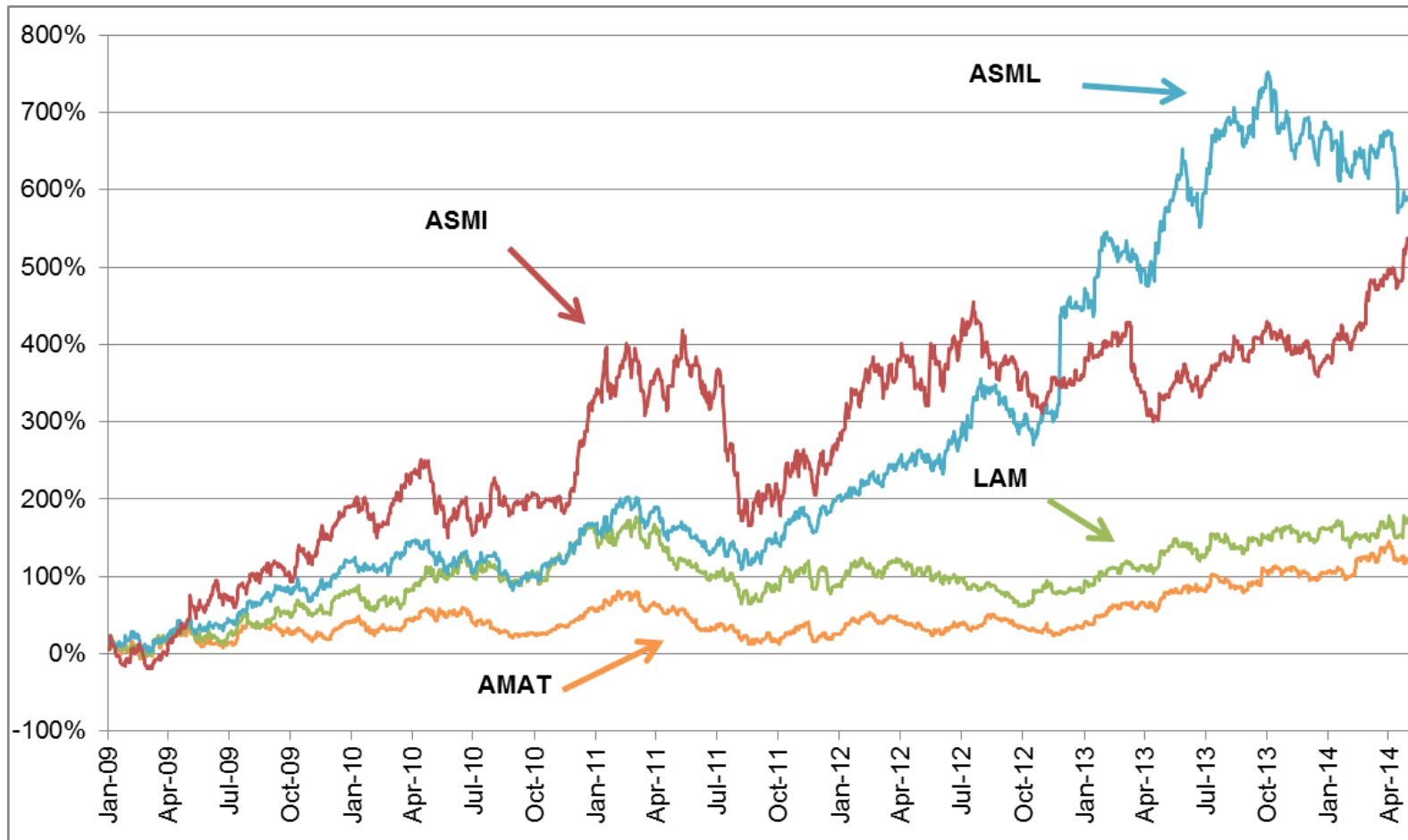
TOTAL SHAREHOLDER RETURN IN 2012 AND 2013



› Comparison same sector companies

› Includes dividend payouts and redistribution of capital

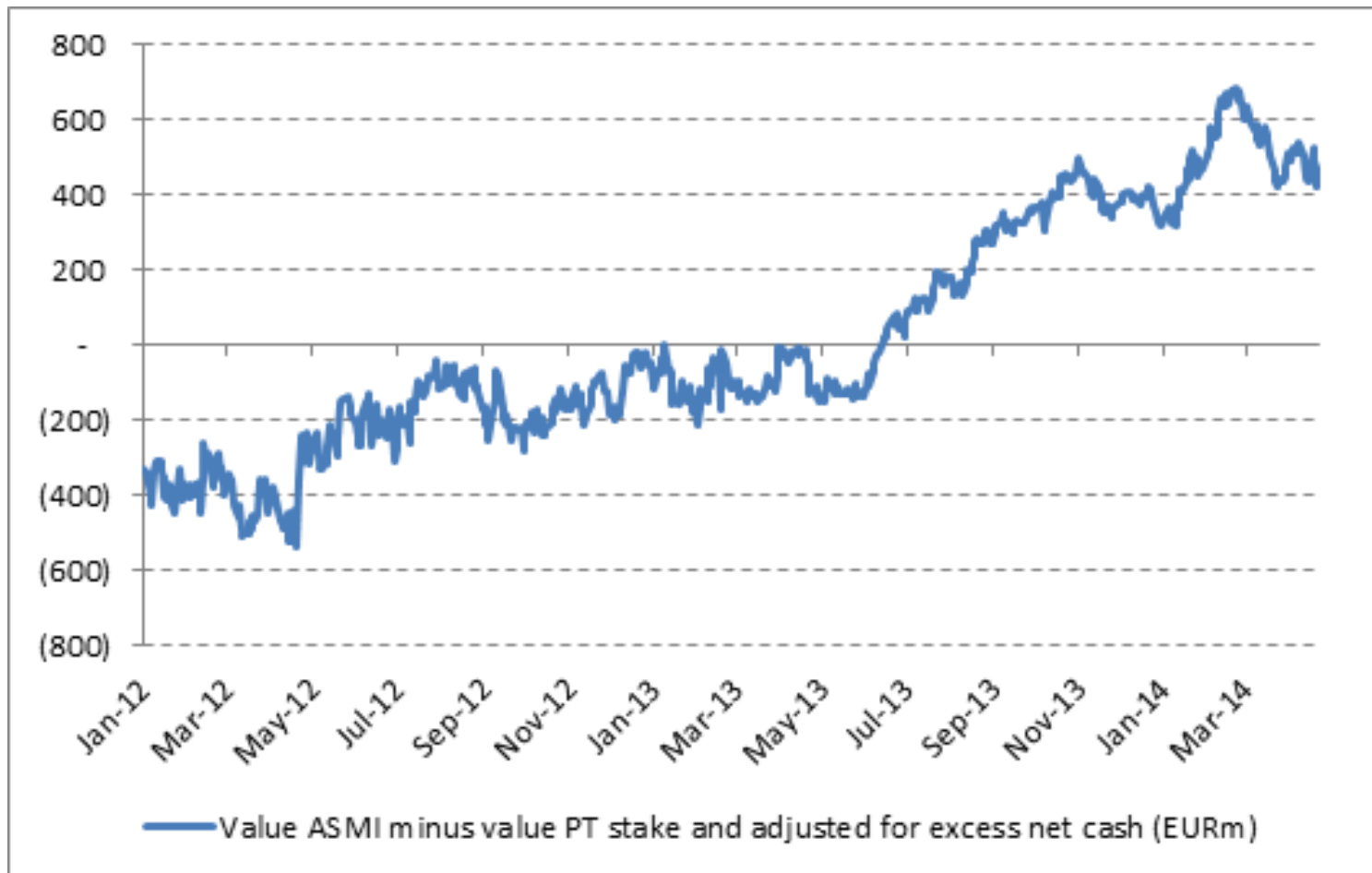
TOTAL SHAREHOLDER RETURN LAST 5 YEARS



> Comparison same sector companies

> Includes dividend payouts and redistribution of capital

IMPLIED VALUE



- Strong improvement in implied value from negative EUR 400-500 million in May 2012 to more than EUR 400 million on May 15 2014

OUTLINE

- › Semiconductor equipment market in 2013
- › Reduction of stake in ASMPT
- › ASMI results in 2013
- › **Corporate Responsibility**
- › Status ASMI
 - Results
 - Products & Business highlights
- › Market outlook and conclusions

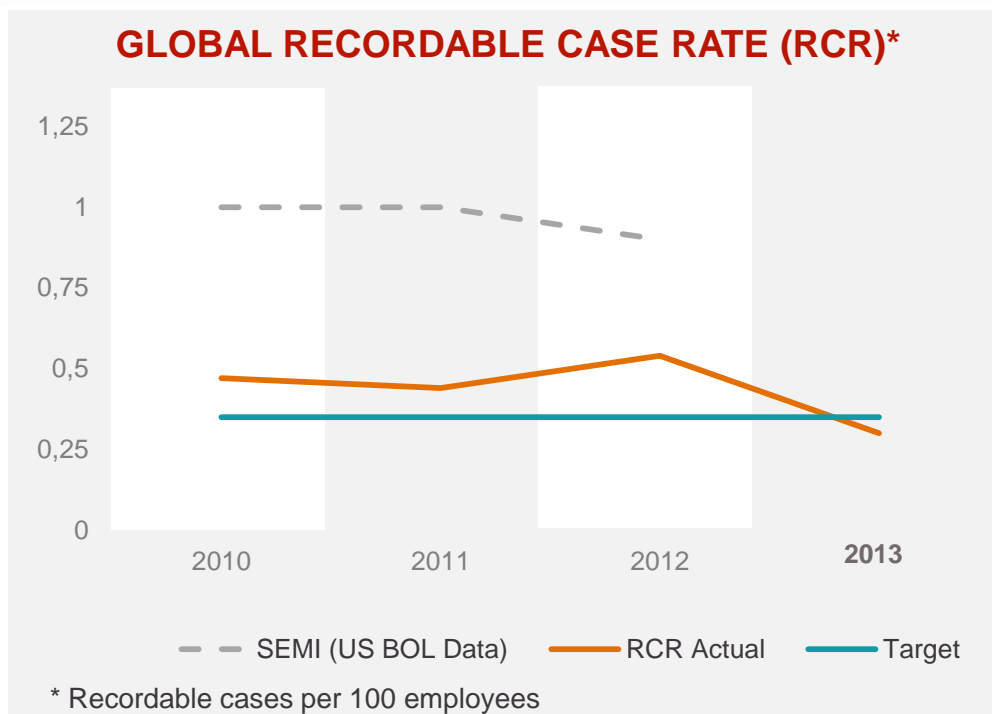
- › **ASMI follows Electronics Industry Citizenship Coalition (EICC) principles**

- › **ASMI conducted EICC self assessments in 2013, all were “Low Risk”**

- › **Current status:**
 - Customer audits in 2013 on EICC compliance were satisfactory
 - ASMI’s Contract Manufacturers also committed to EICC compliance

- › **Next steps:**
 - Drive EICC further into supply chain in 2014
 - Corporate Responsibility Report to be released in first half of 2015

Transparency → ASM Internet site – Corporate Responsibility



> Achieved 2013 RCR of 0.30, lowest in ASM recorded history

- We out-performed most of the industry peers

> Underlying Management and Culture change

- Significantly improved global Safety Training and management system

- › Certified Global Environmental Management System in 2013 (ISO 14001)
- › Regional Scorecards implemented in 2014
- › Key targets in line with SASB Semiconductor Industry
- › Progress made or target met in 3/4 of goals:

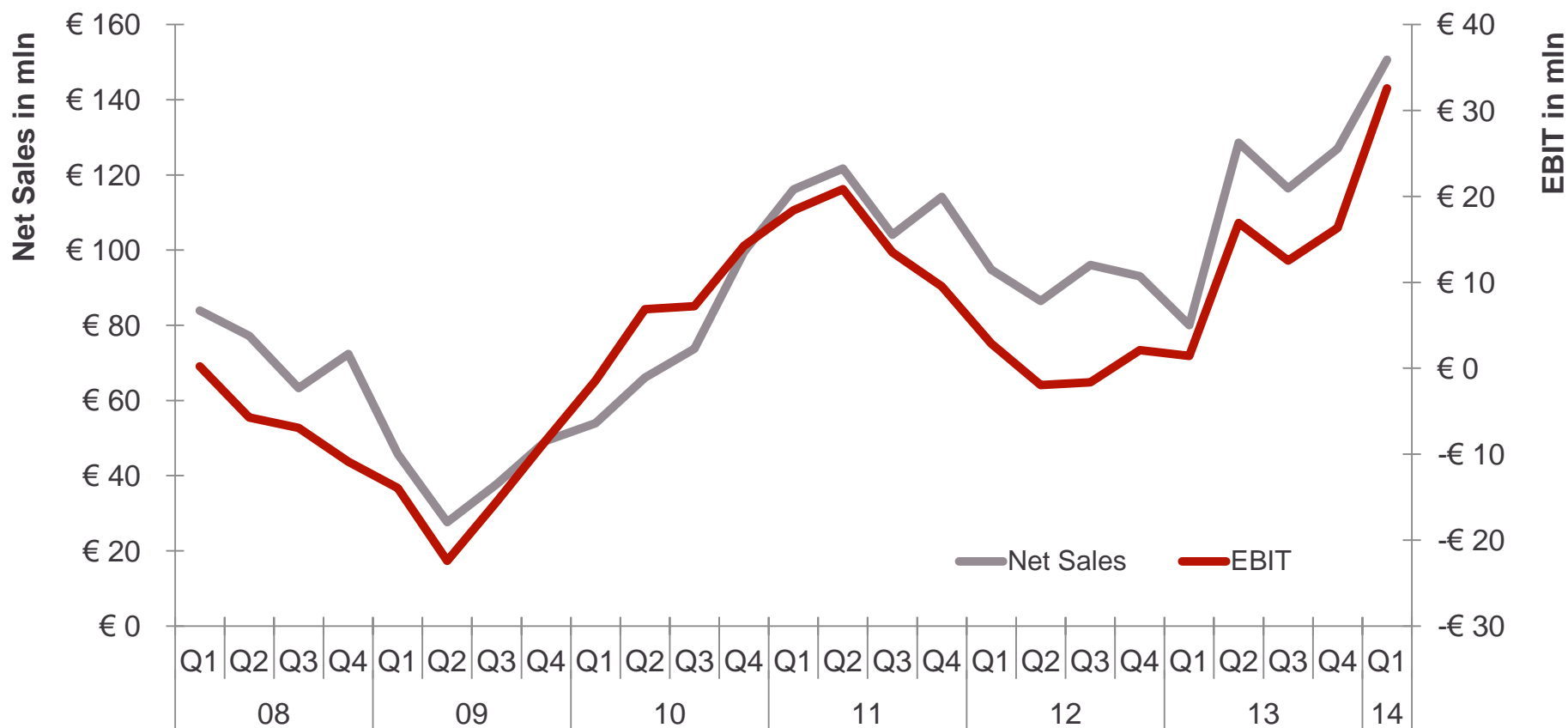
ENVIRONMENT SCORECARD

	OBJECTIVE	UNIT	2012 BASELINE	2013 ACTUAL
ENVIRONMENT	GHG EMISSION (SCOPE 1 AND 2)	METRIC TON EQUIV CO ₂ (MT-CO ₂ E)	14.24K	14.20K
	WATER USAGE	M ³	196.2K	199.2K
	RECYCLED SOLID WASTE	PERCENT (%) OF TOTAL SOLID WASTE	49%	58%
	UNINTENDED DISCHARGES	TOTAL COUNT	0	0

OUTLINE

- › Semiconductor equipment market in 2013
- › Reduction of stake in ASMPT
- › ASMI results in 2013
- › Corporate Responsibility
- › **Status ASMI**
 - **Results**
 - Products & Business highlights
- › Market outlook and conclusions

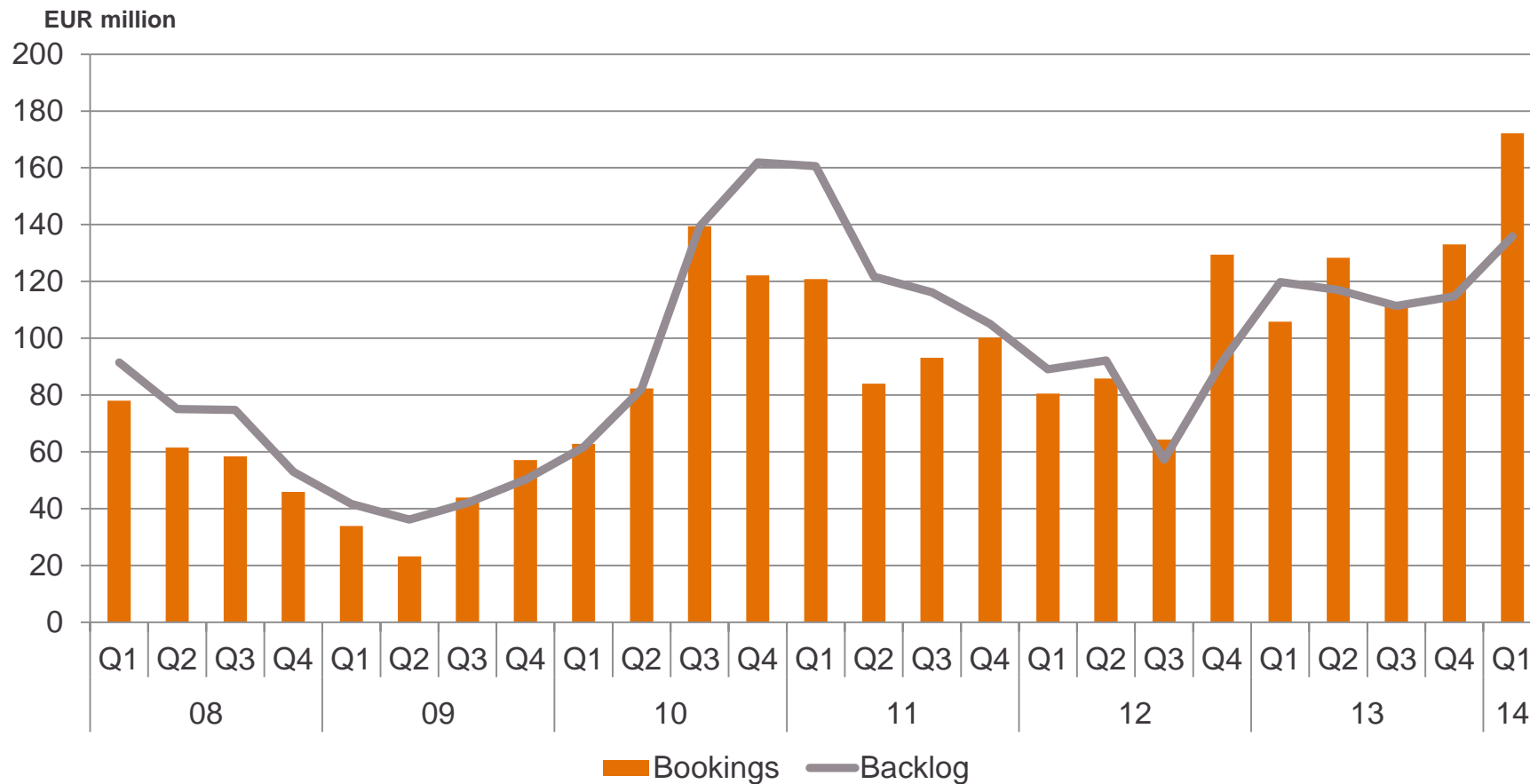
HISTORICAL DEVELOPMENT – FRONT-END



SUMMARY 2013 – FRONT-END

EUR million	FULL YEAR 2012	FULL YEAR 2013	Q1 2013	Q2 2013	Q3 2013	Q4 2013	Q1 2014
Net Sales	370.4	452.0	80.0	128.6	116.4	126.9	150.7
Gross Margin	124.5	176.2	30.2	50.5	45.6	49.9	65.9
<i>as % of sales</i>	33.6%	39.0%	37.7%	39.3%	39.1%	39.3%	43.7%
Research and development	(58.7)	(58.3)	(13.4)	(15.0)	(14.8)	(15.0)	(14.1)
Selling, general and administrative	(64.4)	(70.7)	(15.3)	(18.6)	(18.2)	(18.6)	(19.2)
EBIT (excl. restructuring)	1.4	47.2	1.4	16.9	12.5	16.3	32.5
<i>as % of sales</i>	0.4%	10.4%	1.8%	13.1%	10.8%	12.9%	21.6%
Bookings	360	480	106	128	112	133	172
Book-to-Bill	1.0	1.1	1.3	1.0	1.0	1.0	1.1

BOOKINGS & BACKLOG – FRONT-END



OUTLINE

- › Semiconductor equipment market in 2013
- › Reduction of stake in ASMPT
- › ASMI results in 2013
- › Corporate Responsibility
- › **Status ASMI**
 - Results
 - **Products & Business highlights**
- › Market outlook and conclusions

› ASM focuses on deposition equipment

› ASM has a leading position in ALD and PEALD:

- ALD for High-k Metal Gates
- PEALD spacers for Double Patterning
- Additional applications in qualification



Pulsar XP
ALD High-k



XP8
PEALD, PECVD

› Positions in Epitaxy, PECVD and Vertical Furnaces



Intrepid XP
Epitaxy



A412
Vertical
Furnace

WHAT HAS CHANGED IN 2013?

> **ALD and PEALD further established as mainstream technologies**

- ALD and PEALD market outperformed the broader equipment market

> **Strong revenue momentum**

- ASMI grew revenue by 22% in 2013
- Outperforming the overall equipment market, which declined 8%

> **Improved profitability**

- Gross margin increased to 39%
- Programs in place for further margin enhancements

> **Solid balance sheet**

- Over EUR 300m in cash, no debts
- Strongly improved cash flow

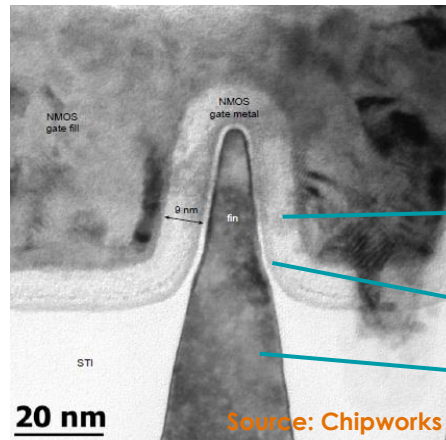
> **ALD technology is a key enabler of Moore's Law**

- Strengths of Atomic Layer Deposition: high-precision deposition of smooth and conformal ultra-thin films
- Device scaling, new materials and vertical transistors

> **Strong growth of ALD market**

- Drivers are further deployment of ALD and PEALD in volume manufacturing, new applications and additional process steps
- ALD market expected to outperform the broader semiconductor equipment market

ASM's ALD films are deposited conformally on top of the Fin



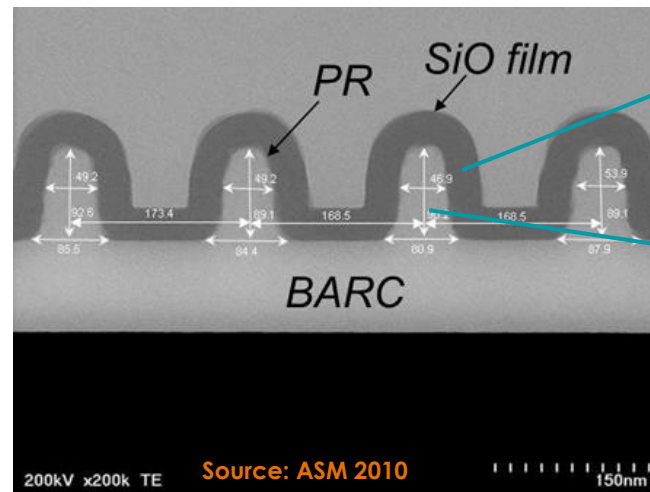
ALD metal gate electrode

ALD high-k gate dielectric

Fin

FinFET cross section

ASM's PEALD SiO films are deposited conformally on photoresist



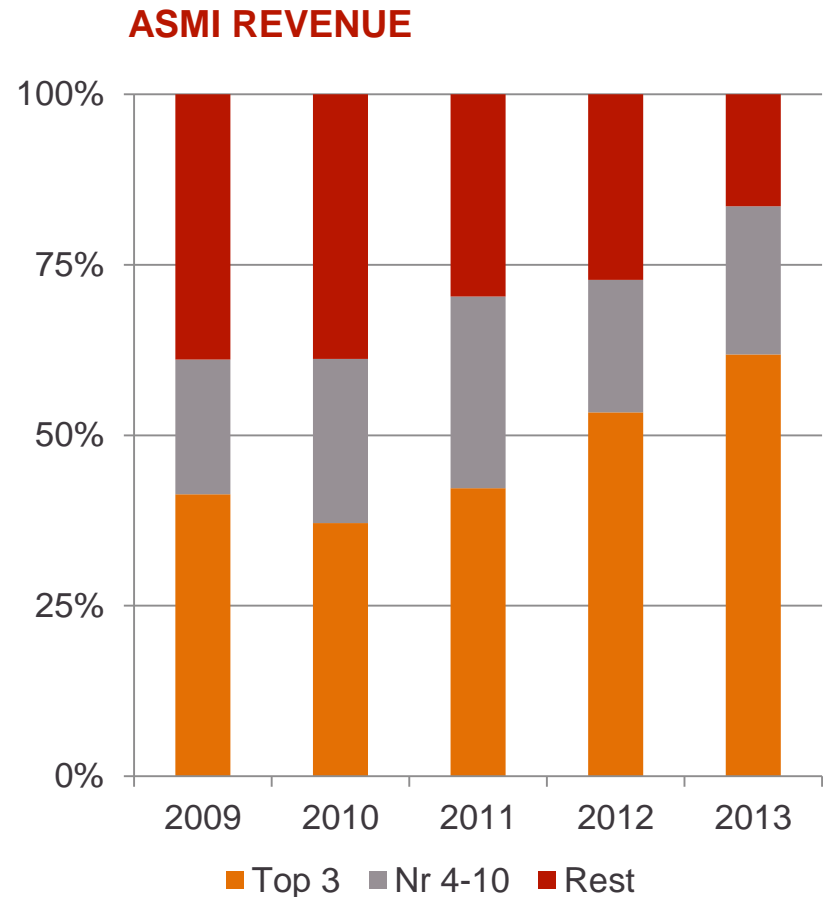
PEALD spacer

photoresist

Cross section of photoresist

GROWING WALLET SHARE WITH TOP CLIENTS

- › Wider adoption amongst top capex customers
- › Diversification of customer base from Logic to Memory and Foundries
- › Weight of Asia growing



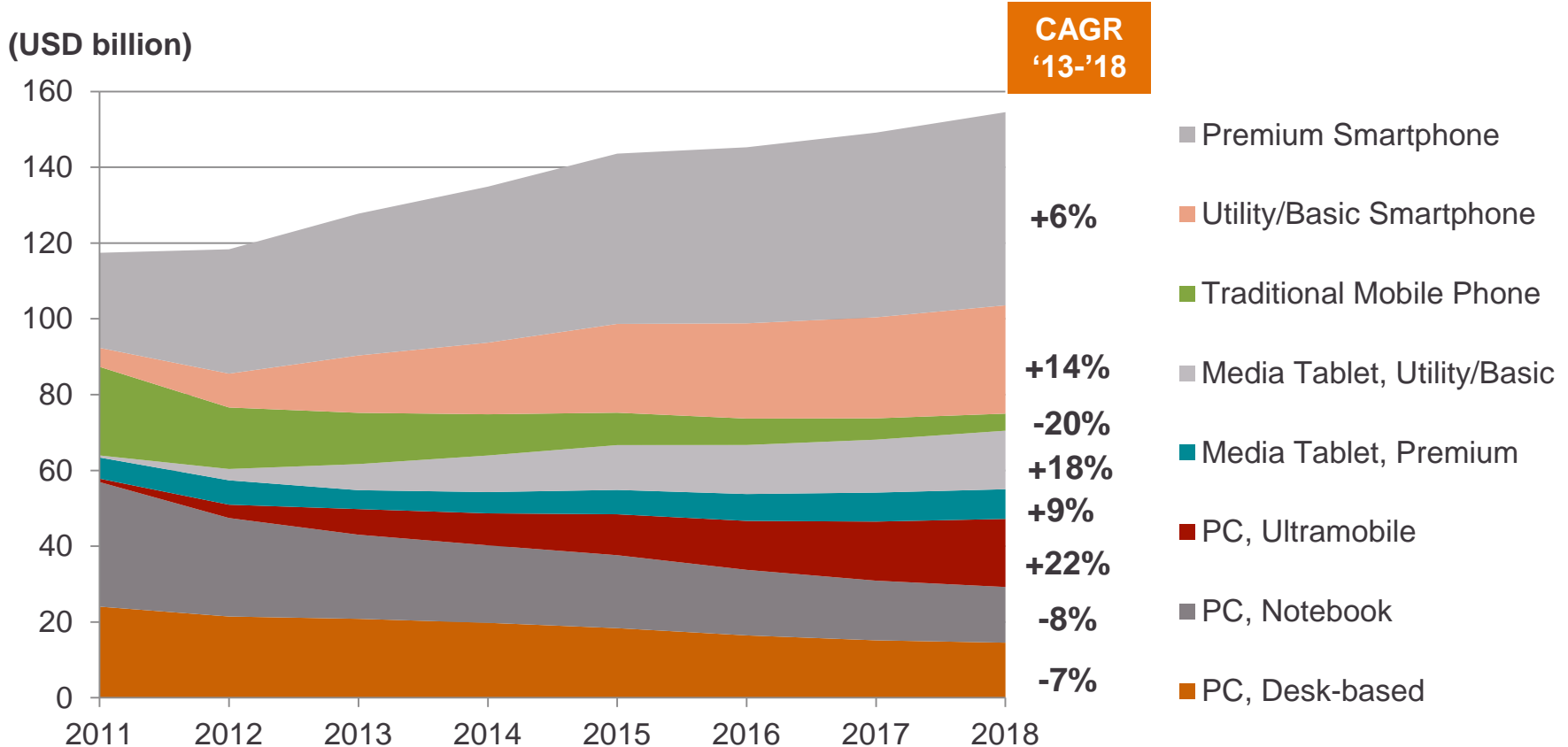
Growing share of wallet with top clients

OUTLINE

- › Semiconductor equipment market in 2013
- › Reduction of stake in ASMPT
- › ASMI results in 2013
- › Corporate Responsibility
- › Status ASMI
 - Results
 - Products & Business highlights
- › **Market outlook and conclusions**

SEMICONDUCTOR GROWTH DRIVERS

SEMICONDUCTOR SALES BY KEY APPLICATION

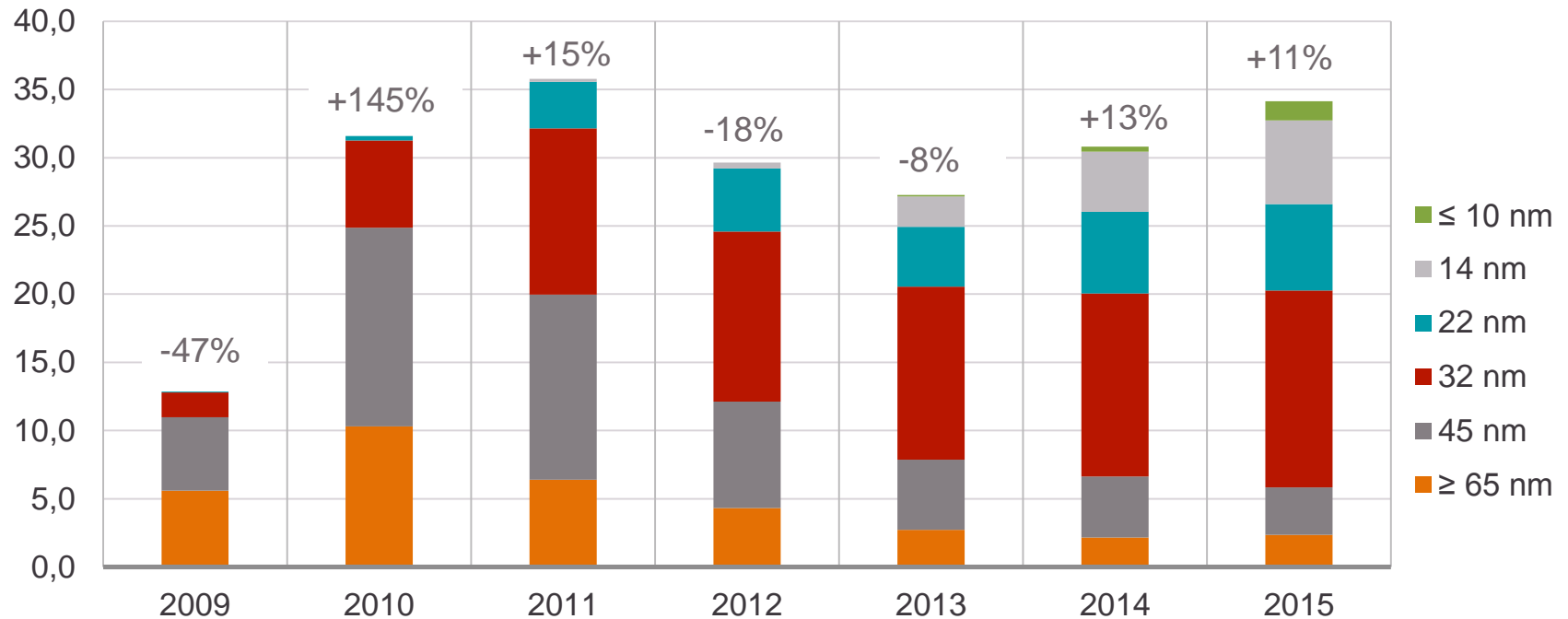


Source: Gartner, April 2014

Semiconductor growth drivers are mobile devices

WAFER FAB EQUIPMENT BY TECHNOLOGY NODE

(USD billion)



Source: Gartner, April 2014

**Forecast shows strong growth in advanced technology nodes
22nm, 14nm and 10nm**

Based upon the current backlog and our current visibility:

For Q2 2014 we expect for sales a low single digit decrease, on a currency comparable base. For the second half of 2014, the current visibility remains limited. After the very high order intake in Q1, the Q2 2014 order intake is expected to show a strong double digit decrease as compared to Q1 2014, on a currency comparable base.

SUMMARY

- › **Reduced shareholding in ASMPT from 52% to 40% in March 2013**
- › **Revenue increased 22% compared to 2012, outperforming the overall wafer fab equipment market**
- › **ALD and PEALD strongly developed further traction in 2013**
- › **Achieved strong gross margin improvements in 2013**
- › **Company believes to be well positioned to benefit from the semiconductor end product growth drivers in 2014-2018**
- › **Technology shift in the industry will require more ALD/PEALD**

