



ASMI ANNUAL MEETING OF SHAREHOLDERS 2016

Chuck del Prado, President & CEO May 25, 2016

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS



Cautionary note regarding forward-looking statements: All matters discussed in this presentation, 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 forwardlooking 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, shareholders and/or 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 reports and financial statements. The company assumes no obligation nor intends to update or revise any forward-looking statements to reflect future developments or circumstances.

OUTLINE



- > Semiconductor capital spending in 2015
- > ASMI results in 2015
- Corporate responsibility
- > Products & business highlights
- Market outlook and conclusions

OUTLINE



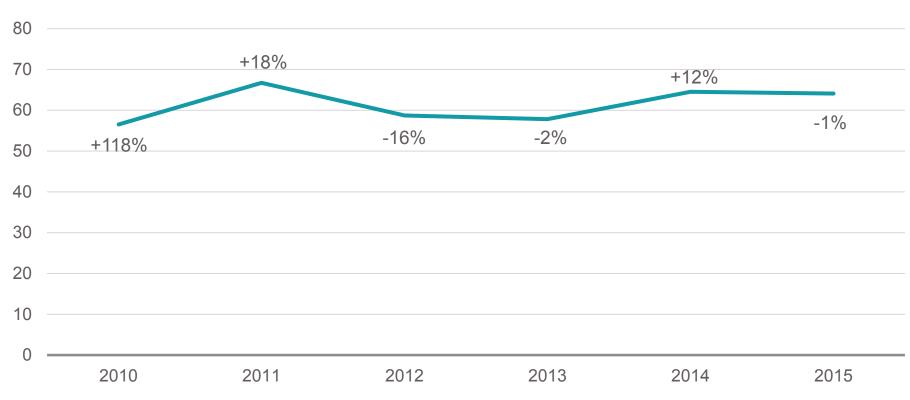


OUR INDUSTRY WAS SLIGHTLY DOWN IN 2015



SEMICONDUCTOR CAPITAL SPENDING





Source: Gartner, April 2016

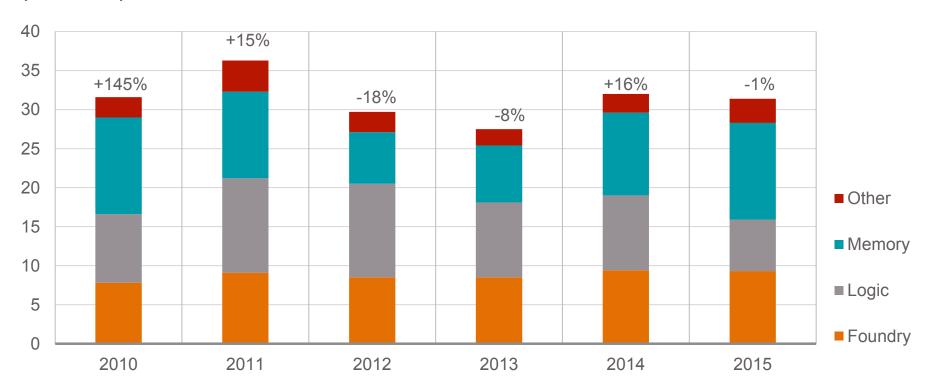
Semiconductor capex was down in 2015 by 1%

WAFER FAB EQUIPMENT WAS SLIGHTLY DOWN IN 2015



WAFER FAB EQUIPMENT BY DEVICE TYPE

(USD billion)



Source: Gartner, April 2016

- 2015 WFE spending decreased by 1%
- Memory was strong, Logic was weak

OUTLINE





KEY HIGHLIGHTS – 2015 (BASED ON IFRS)



- > ASMI revenues up 23% and up 14% at constant currencies
- Gross margin further increased to 44%
- > ASMI EBIT margin 16.6% in 2015 compared to 17.1% in 2014
 - Excluding impairments 450 mm, margin improved from 17.3% in 2014 to 19.0% in 2015
- > Free cash flow up 33% to €104 million in 2015
 - Second €100 million share buyback program announced October 2015
 - Proposal to ASMI 2016 AGM for dividend of €0.70 per share
- Normalized net earnings of €185 million up from €161 million in 2014
 - ASMPT contributed €44 million to net earnings in 2015

NET EARNINGS 2015



FINANCIALS BASED ON IFRS																	
EUR million	FULL YEAR 2014	FULL YEAR 2015	Q1 2015	Q2 2015	Q3 2015	Q4 2015	Q1 2016										
NET SALES	546	670	162	201	162	145	142										
GROSS PROFIT	235	296	70	91	70	65	63										
Gross margin	43.1%	44.1%	43.1%	45.0%	43.4%	44.8%	43.9%										
Selling, general and administrative	(81)	(93)	(21)	(25)	(24)	(23)	(23)										
Research and development	(61)	(90)	(18)	(20)	(15)	(37)	(21)										
Restructuring	(0.1)	(1.7)	-	(0.5)	(0.3)	(0.9)	(0.5)										
EBIT	93	111	31	45	31	4	19										
EBIT margin	17.1%	16.6%	19.2%	22.1%	18.9%	2.8%	13.2%										
Financing cost	25	25	28	(12)	2	6	(11)										
Income tax	(19)	5	(4)	(5)	8	7	(2)										
Result from investments*	62	43	13	20	9	2	6										
Amortization intangible assets resulting																	
from the sale of the 12% stake of ASMPT	(23)	(27)	(7)	(7)	(7)	(7)	(7)										
	()	,	()	()	` '	(/	()										
NET RESULT	138	157	62	42	43	11	5	`					amortization le assets resi				amortization le assets resulti
NORMALIZED NET RESULT*	161	185	68	49	50	18	12	from the	Si	sale o	sale of the	sale of the	sale of the 1	sale of the 12	sale of the 12	sale of the 129	sale of the 12%
NURMALIZED NET RESULT*	161	185	68	49	50	18	12	stake	of As	of ASMP	of ASMPT)	of ASMPT)	of ASMPT)	of ASMPT)	of ASMPT)	of ASMPT)	of ASMPT)

BALANCE SHEET



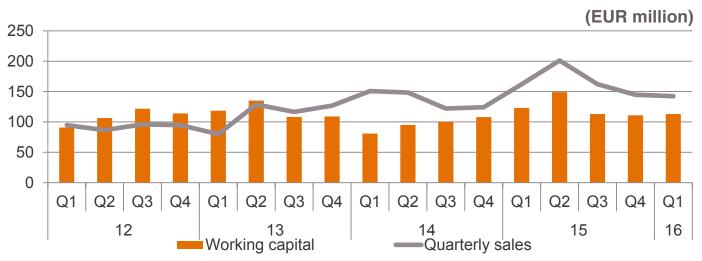
FINANCIALS BASED ON IFRS

EUR million	DEC 2014	DEC 2015	MAR 2016
LON IIIIIIIOII			
Cash and cash equivalents	386	447	416
Other current assets	234	223	232
Property, plant and equipment, net	79	92	91
Goodwill, net	11	11	11
Other intangible assets	65	82	85
Investments & associates, and other assets	1,093	1,181	1,134
Other non-current assets	21	41	42
TOTAL ASSETS	1,889	2,076	2,010
ST debt (incl. current LT debt)	_	_	-
Other current liabilities	135	115	117
Other long term liabilities	12	13	13
TOTAL LIABILITIES	146	128	130
Total shareholders' equity	1,743	1,948	1,880
TOTAL LIABILITIES & EQUITY	1,889	2,076	2,010

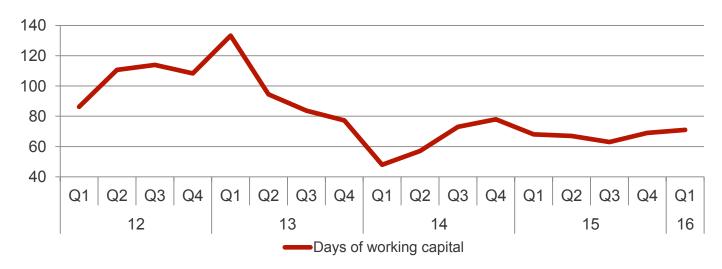
WORKING CAPITAL







DAYS



CASH FLOW

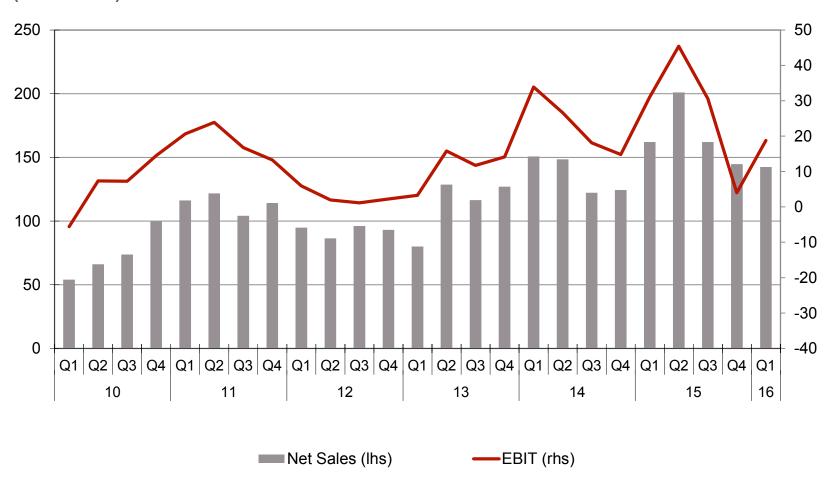


FINANCIALS BASED ON IFRS				
EUR million	FULL YEAR 2014	FULL YEAR 2015	Q1 2015	Q1 2016
LOTT MIMION	2014	2010	2010	2010
Normalized net result	164	185	68	12
Depreciation and amortization	33	54	9	12
Working capital	0	3	0	(9)
Result from investments	(62)	(44)	(13)	(6)
Other adjustments	(10)	(23)	(22)	10
Net cash from operating activities	125	175	43	19
Dividend received from investments	20	43	-	-
Capitalized development expenditure	(14)	(30)	(6)	(7)
Capital expenditure and other	(32)	(40)	(8)	(7)
Net cash from investing activities	(26)	(29)	(14)	(14)
Net cash from financing activities	(58)	(105)	(25)	(24)
Net cash (used) provided	41	41	4	(19)

HISTORICAL DEVELOPMENT – ASMI



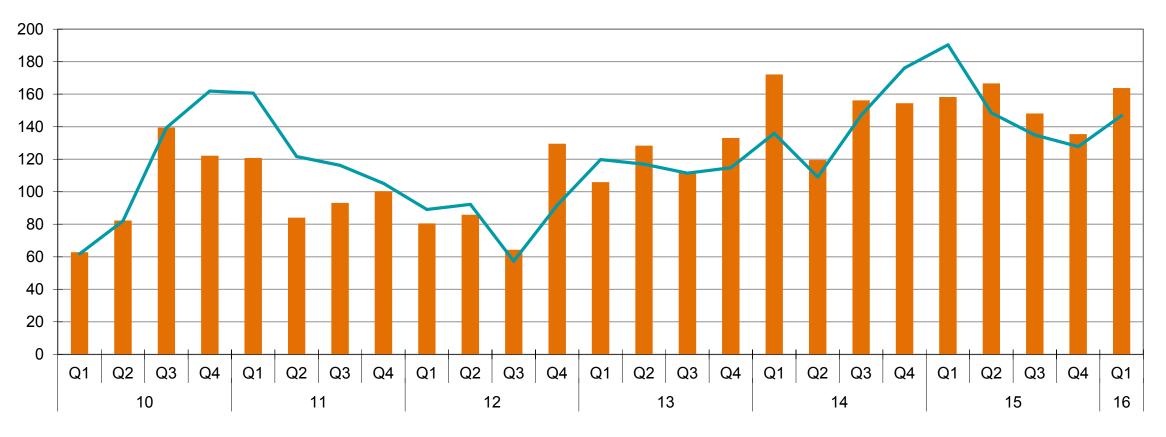
(EUR million)



BOOKINGS & BACKLOG – ASMI



(EUR million)



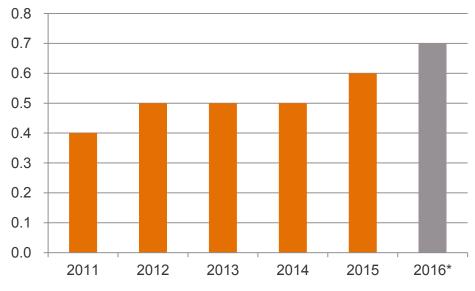
Bookings Backlog

SHAREHOLDER REMUNERATION

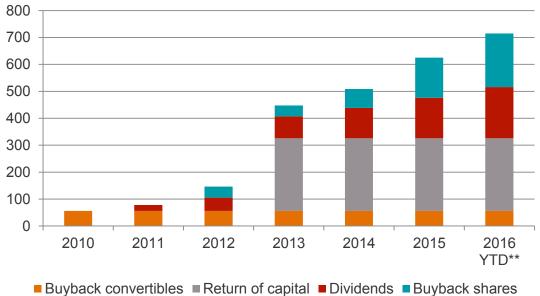


- > Proposed dividend increases by 17% to €0.70 per share
- > Second €100 million share buyback announced in October 2015
 - To be executed in 2015/2016 timeframe; 57% completed as of May 23, 2016
 - As part of commitment to use excess cash for the benefit of shareholders

DIVIDEND PER SHARE PAID (EUR)



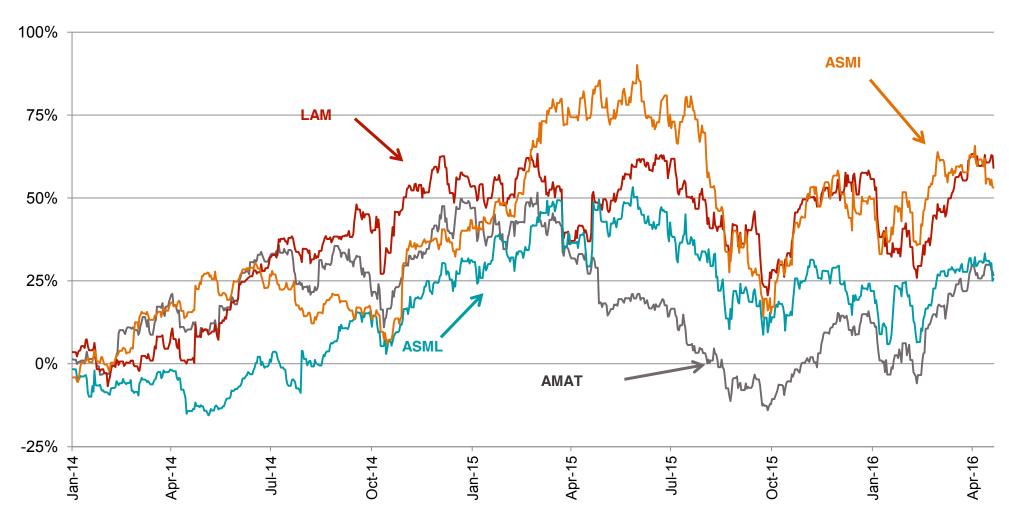
CUMULATIVE CASH RETURNED TO MARKET '10-'16 YTD (EUR M)



*proposed

TOTAL SHAREHOLDER RETURN IN 2014-2015

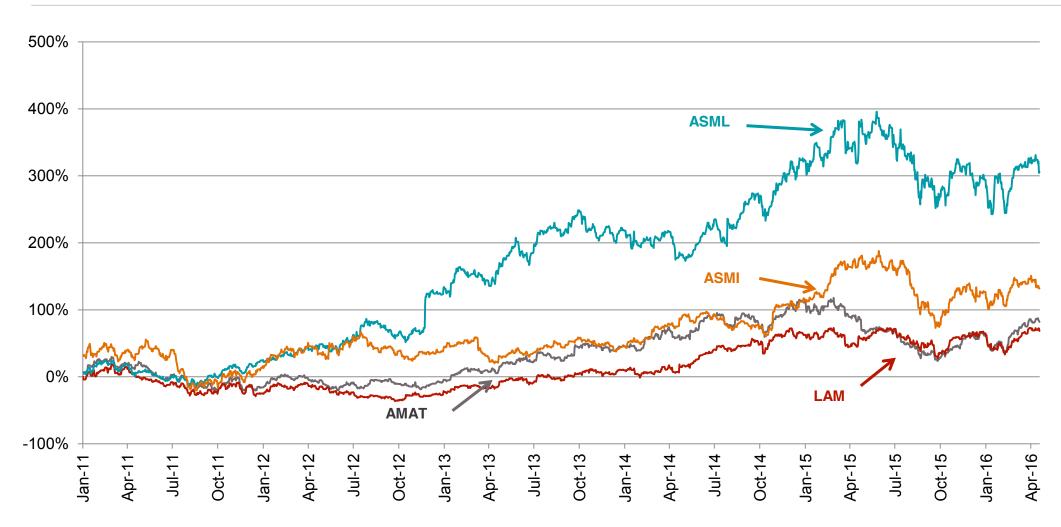




- > Comparison of same sector companies
- Includes dividend payouts and redistribution of capital

TOTAL SHAREHOLDER RETURN 2011-2015





- Comparison of same sector companies
- Includes dividend payouts and redistribution of capital

IMPLIED VALUE FRONT-END





- —Value ASMI minus value PT stake and adjusted for excess net cash (EURm)
- > Strong increase in implied value to €1.0 billion positive up from €400-500 million negative in May 2012

SHAREHOLDING IN ASMPT



- > As of 15 March 2013, our share of approximately 40% of ASMPT's net earnings is included in 'result from investments'
- > Amortization intangible assets resulting from the sale of the 12% stake in ASMPT amounted to €27 million in 2015

EUR million	Full year 2014	Full year 2015	Q1 2016
Sales ASMPT (HK\$ million)	14,229	12,977	2,862
Net profit ASMPT (EUR million, 100% based)	179	120	16
Result from investments (including ASMI's 40% share of ASMPT net profit)	62	43	6
Remeasurement gain, realized gain on sale of ASMPT shares, amortization and fair value adjustments	(23)	(27)	(7)
Result from ASMPT investment	39	16	(1)

OUTLINE





CORPORATE RESPONSIBILITY



> Second Annual Corporate Responsibility (CR) Report

- In reference to Global Reporting Initiative (GRI) G4 Standard
- Reported Materiality Assessment and Stakeholder Engagement

> Electronics Industry Citizenship Coalition (EICC) Code of Conduct

- Continued "Low Risk" ranking in official EICC system
- Performance against the Code of Conduct is a corporate objective
- Conducted third-party audits of 3 key ASM sites
- Expanded accountability into supply chain, conducted high-risk supplier audits

Next Steps:

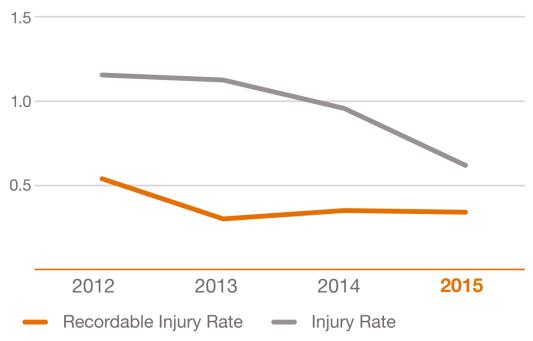
Complete 3rd Party EICC audits at 2 remaining key sites before the end of 2017

Transparency → ASM website + Corporate Responsibility Report

HEALTH & SAFETY



GLOBAL INJURY AND RECORDABLE RATES



- Injury rate declines for 5th year in a row
- Safety Leadership engagement sessions almost complete
- Global Service Safety Manager added
- > Further strengthened high risk area strategic safety plans
 - Service, Engineering Lab and Manufacturing

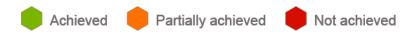
ENVIRONMENT



Completed three-year plan (2013-2015)

ENVIRONMENTAL SCORECARD

OBJECTIVES	UNIT	RESULTS 2015	
GREENHOUSE GAS (GHG) REDUCING MEASURES	METRIC TON EQUIV CO ₂ (MT	CO ₂ E) 94% OF TARGET	
WATER USAGE REDUCTION (M³)	M ³	248% OF TARGET	
RECYCLED SOLID WASTE DIVERSION RATE	PERCENT (%) OF TOTAL SOL	LIDWASTE 65%	•
COMPLIANCE WITH DISCHARGE REQUIREMENTS	TOTAL COUNT	ZERO VIOLATIONS	



> 2016-2020 Targets

- Reduce GHG emissions by 5% / R&D spend below 2015 levels by 2020
- Reduce water use by 10% / R&D spend below 2015 levels by 2020
- Less than 10% of all waste to landfill by 2020
- New construction projects exceed energy efficiency standards of local jurisdictions

OUTLINE





ASM PRODUCTS - FOCUS ON DEPOSITION



- > ASM has a leading position in ALD
 - ALD for high-k metal gates
 - ALD spacers for multiple patterning (Memory & Logic)
- > ASM Epitaxy strong position in Analog & Power





> PECVD

- **)** Low-k supplier for 7th consecutive Logic device node
- New PECVD opportunities on XP8 platform
- Vertical furnace increased business for More-than-Moore apps



Pulsar XP ALD high-k



FmerAl D XP **ALD** metal gate



A412 vertical **furnace**

WHAT HAS CHANGED IN 2015?



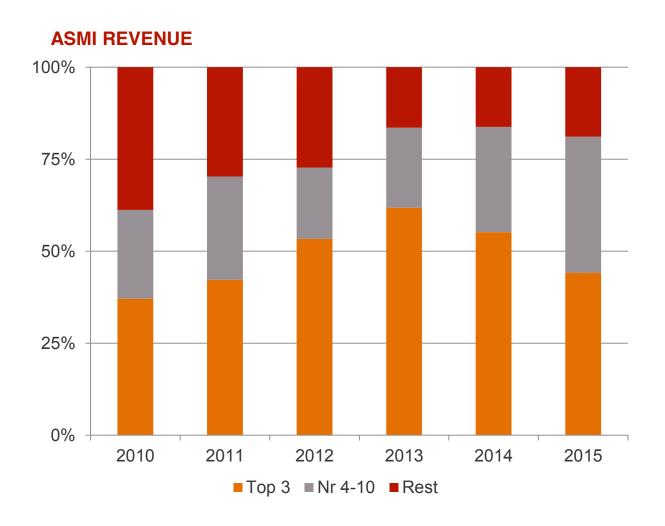
- > Further broadening of single wafer ALD applications
- > Revenue contribution of Memory segment further increased
- > Further strengthened position within the top-10 capex customers
- > 2015 another year in which ASMI outgrew the wafer fab equipment market



GROWING WALLET SHARE WITH TOP CLIENTS



> Further grew our position beyond the top-3 in the top-10 capex spenders in 2015

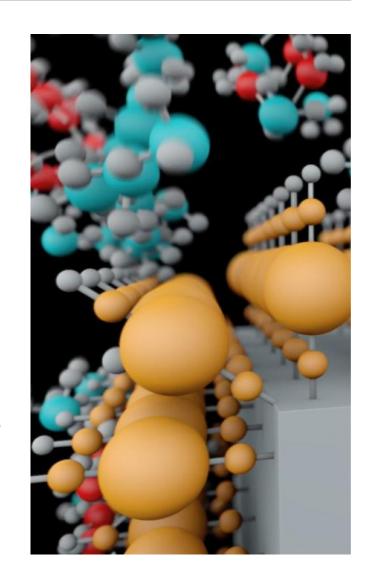


Growing share of wallet with top clients

ALD BECOMING AN IMPORTANT DEPOSITION EQUIPMENT SEGMENT



- > The CAGR '15-'19 of the ALD segment is highest within the deposition equipment market
- > ALD estimated to represent between 20 and 25% of the total deposition equipment market by 2019
- **)** Drivers for growth:
 - Strengths of ALD: (i) high-precision deposition of smooth and conformal ultra-thin films; (ii) ability to deposit new materials
 - Device scaling, new materials and the use of 3D structures all are drivers to increase demand for ALD

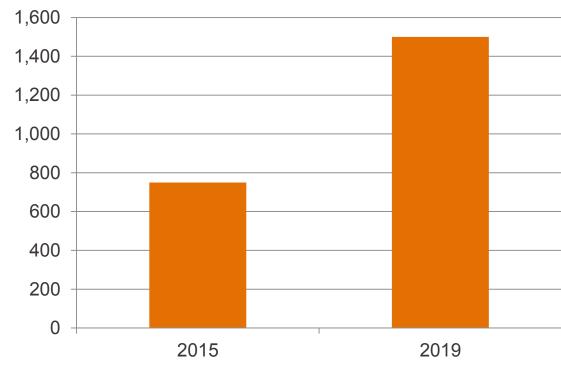


ESTIMATED ALD MARKET GROWTH



ALD MARKET SINGLE WAFER / MINIBATCH

(USD million)



Source: ASMI, Gartner, VLSI April 2016

) Long term growth 2015-2019

- Single wafer ALD market ~\$750m in 2015
- Expected to double to approximately ~\$1.5bn in the next 3-4 years

> Key market growth drivers

- In Logic/Foundry a strong rise in the number of ALD steps going from 16/14nm to 10/7nm: new patterning steps, next generation high-k/metal gates and new applications for advanced FinFET devices
- In Memory new films for 3D NAND devices and advanced patterning layers & non-patterning films for DRAM

OUTLINE

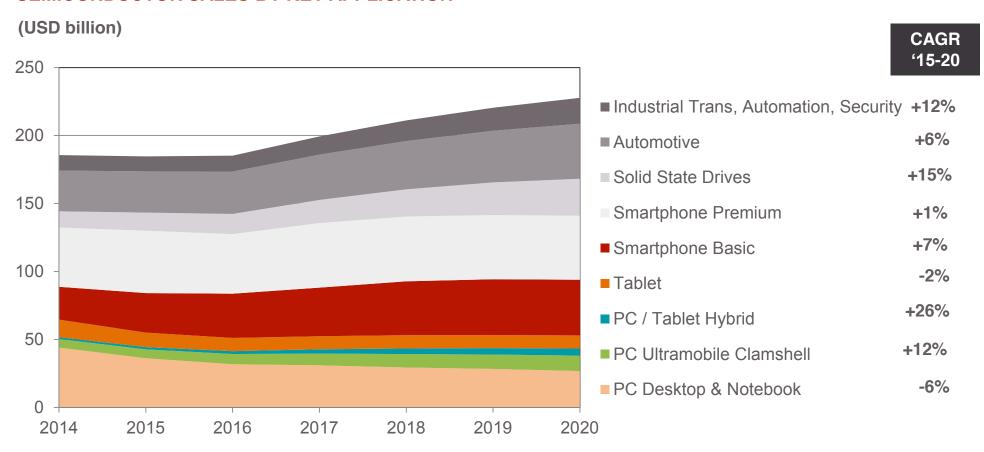




SEMICONDUCTOR GROWTH DRIVERS



SEMICONDUCTOR SALES BY KEY APPLICATION



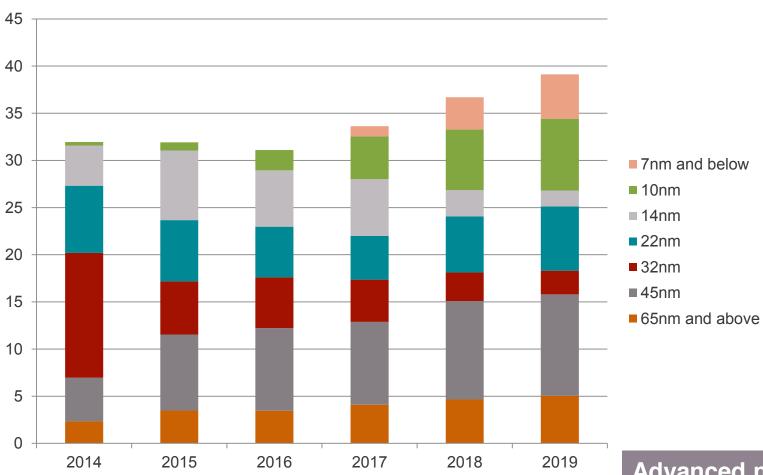
Source: Gartner, April 2016

- Semiconductor growth drivers are mobile devices, but long term growth rate is slowing
- New semi growth drivers are solid state drives, servers, automotive and IoT

ASM MARKETS



WAFER FAB EQUIPMENT BY TECHNOLOGY NODE



Source: Gartner, April 2016

Advanced nodes: market segments with high expected growth



Based upon the current backlog and our current visibility:

For Q2 we expect sales between €130-€140 million, while we expect an order intake of €145-€165 million, both on a currency comparable level.

Based upon the current visibility, we expect a much stronger second half as compared to the first half of 2016.



SUMMARY



- > Revenue increased 23% in 2015 and 14% at constant currencies, again outperforming the overall wafer fab equipment market
- > Solid traction in ALD continued in 2015
- > Strong improvement in free cash flow
- > The Company believes to be well positioned for an increased number of ALD applications in the next technology nodes for Logic/Foundry/Memory





