



INTRODUCTION

ASMI ANNUAL MEETING OF SHAREHOLDERS 2017

May 22, 2017



CONNECTING
THE DOTS

ASMI ANNUAL MEETING
OF SHAREHOLDERS 2017

Chuck del Prado, President & CEO

May 22, 2017

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 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, shareholders 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.

- › Semiconductor capital spending in 2016
- › ASMI results in 2016
- › Corporate responsibility
- › Products & business highlights
- › Market outlook and conclusions

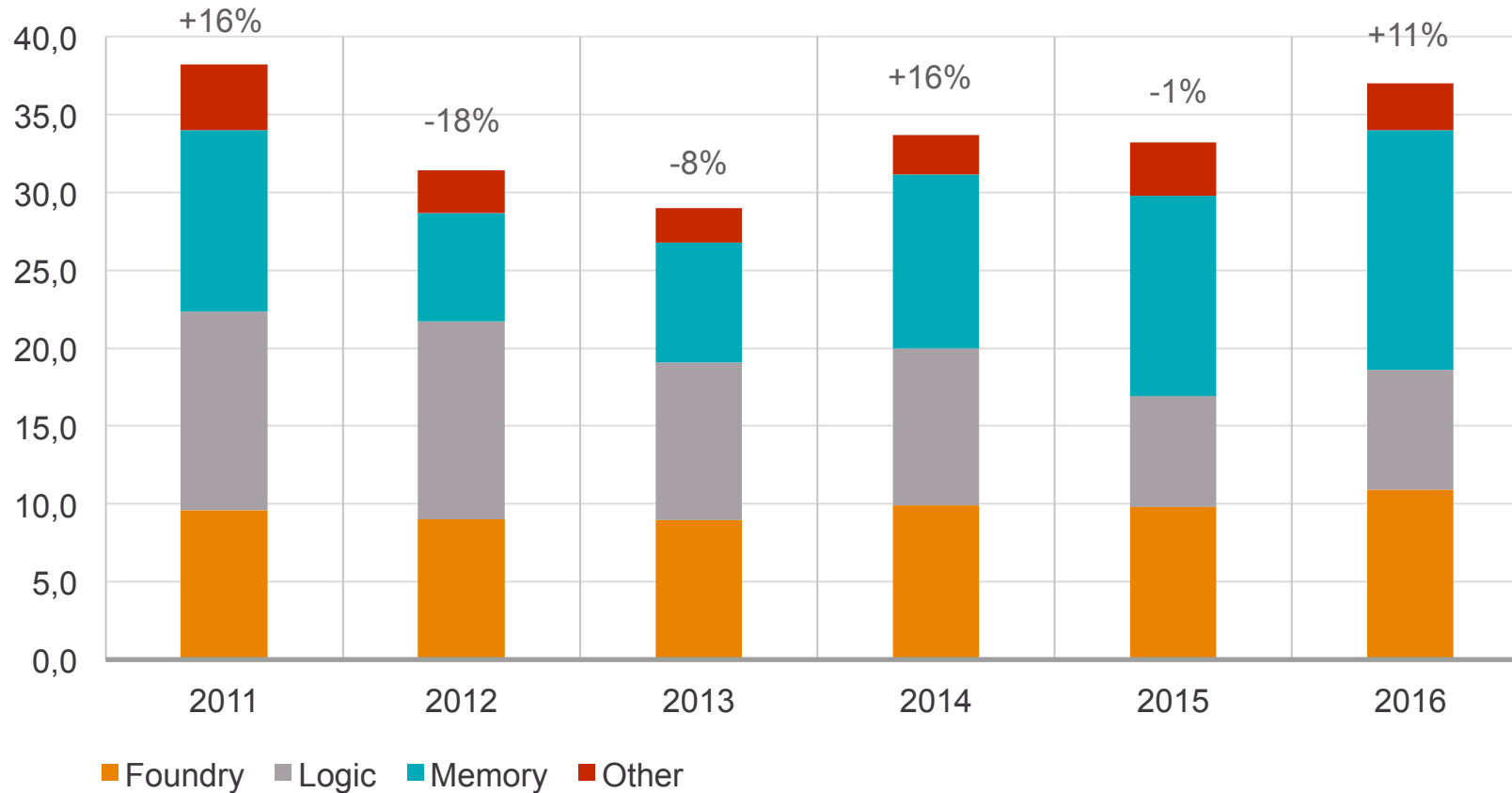
- › **Semiconductor capital spending in 2016**
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WAFER FAB EQUIPMENT WAS UP IN 2016

WAFER FAB EQUIPMENT BY DEVICE TYPE

(USD billion)



- 2016 WFE spending increased by 11%
- Logic/Foundry strong
- Within memory, NAND was strong, DRAM was weak

Source: Gartner, April 2017

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- › **ASMI revenues down 11% to approximately €600 million**
- › **Gross margin stable at 44%**
- › **ASMI EBIT margin 13.8% in 2016 compared to 16.6% in 2015**
 - Driven by lower activity level
 - Operating expenses under control
- › **Normalized net earnings of €163 million down from €185 million in 2015**
 - ASMPT contributed €68 million to net earnings in 2016
- › **Free cash flow €31 million in 2016**
 - Driven by lower results and higher working capital (due to timing issues)
- › **Shareholder returns**
 - €140 million returned to shareholders in 2016 in dividend and share buybacks

NET EARNINGS 2016

FINANCIALS BASED ON IFRS

EUR million	FULL YEAR 2015	FULL YEAR 2016	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017
NET SALES	670	598	142	139	144	173	145
GROSS PROFIT	296	265	63	61	64	78	63
Gross margin	44.1%	44.2%	43.9%	43.8%	44.2%	44.9%	43.5%
Selling, general and administrative	(93)	(88)	(23)	(21)	(21)	(23)	(23)
Research and development	(90)	(91)	(21)	(22)	(24)	(24)	(25)
Restructuring	(2)	(3)	(1)	(1)	(1)	(0)	(1)
EBIT	111	82	19	17	17	30	15
EBIT margin	16.6%	13.8%	13.2%	12.0%	11.7%	17.3%	10.3%
Financing cost	25	15	(11)	10	(3)	19	(7)
Income tax	5	(2)	(2)	(1)	(1)	1	(1)
Result from investments*	44	68	6	16	27	18	35
Amortization intangible assets resulting from the sale of the 12% stake of ASMPT	(27)	(27)	(7)	(7)	(7)	(7)	(6)
NET RESULT	157	136	5	36	33	62	36
NORMALIZED NET RESULT*	185	163	12	42	40	69	42

*(excl. amortization intangible assets resulting from the sale of the 12% stake of ASMPT)

BALANCE SHEET

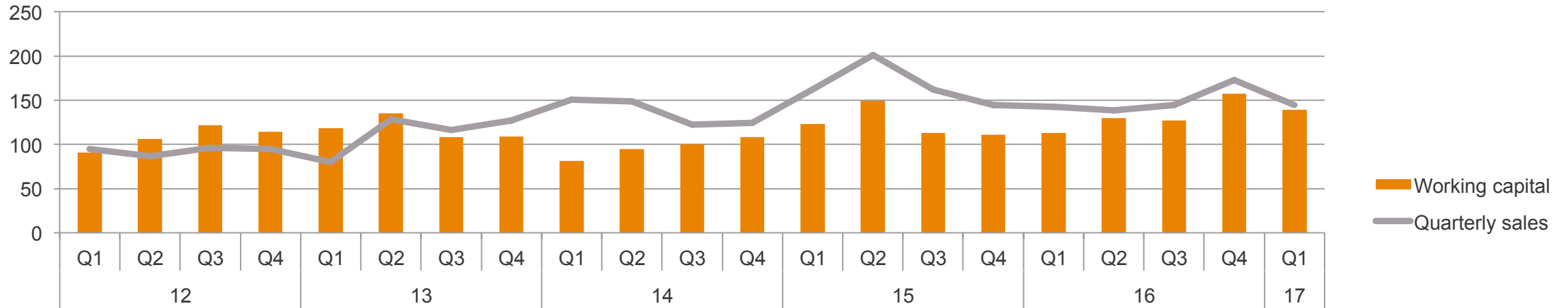
FINANCIALS BASED ON IFRS

EUR million	DEC 2015	DEC 2016	MAR 2017
Cash and cash equivalents	447	378	379
Other current assets	223	272	262
Property, plant and equipment, net	92	95	97
Capitalized development costs	72	86	93
Investments & associates, and other assets	1,181	1,236	1,248
Other non-current assets	62	81	82
TOTAL ASSETS	2,076	2,148	2,161
ST debt	-	-	-
Other current liabilities	115	118	124
Other long term liabilities	13	15	14
TOTAL LIABILITIES	128	133	138
Total shareholders' equity	1,948	2,016	2,023
TOTAL LIABILITIES & EQUITY	2,076	2,148	2,161

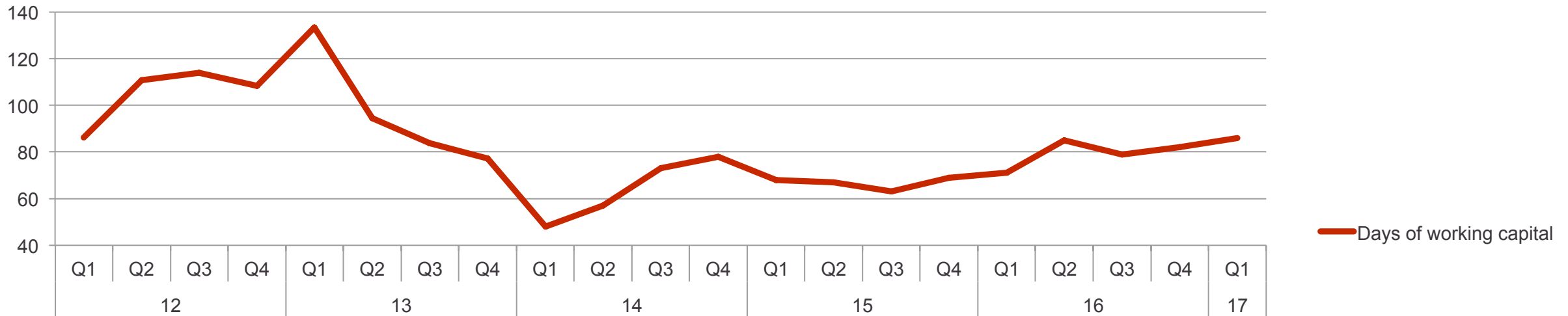
WORKING CAPITAL

VALUE

(EUR million)



DAYS

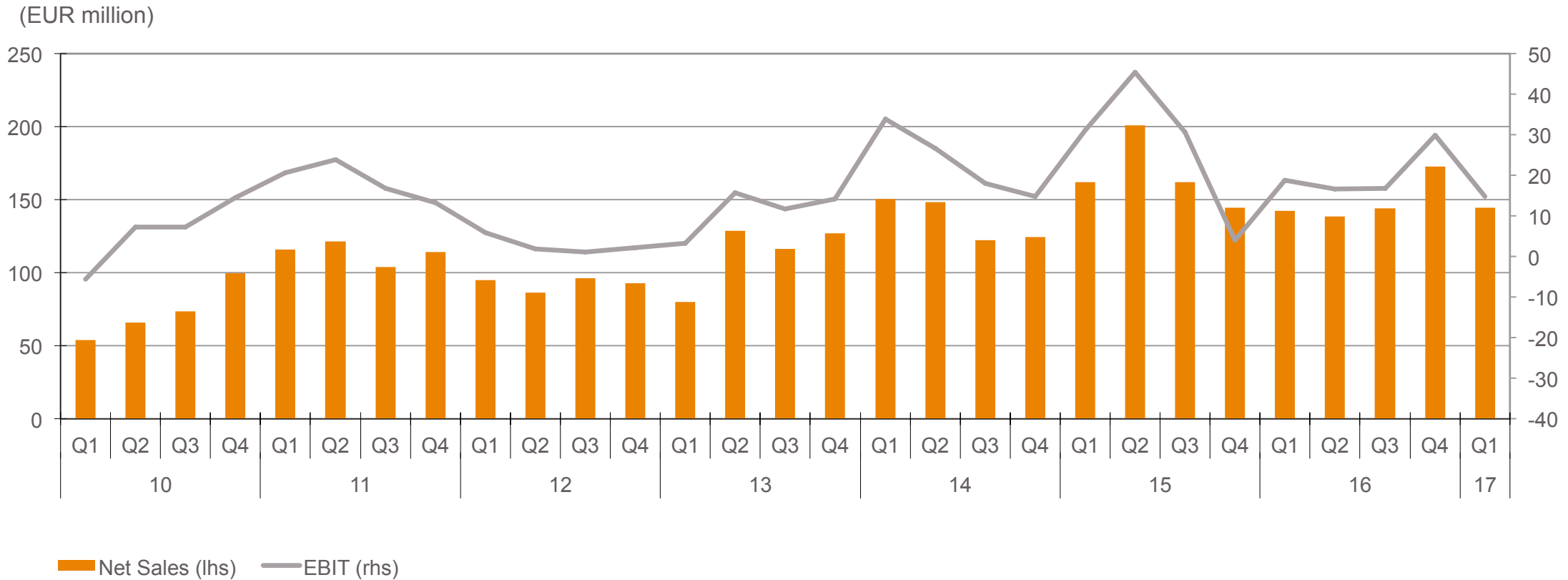


CASH FLOW

FINANCIALS BASED ON IFRS

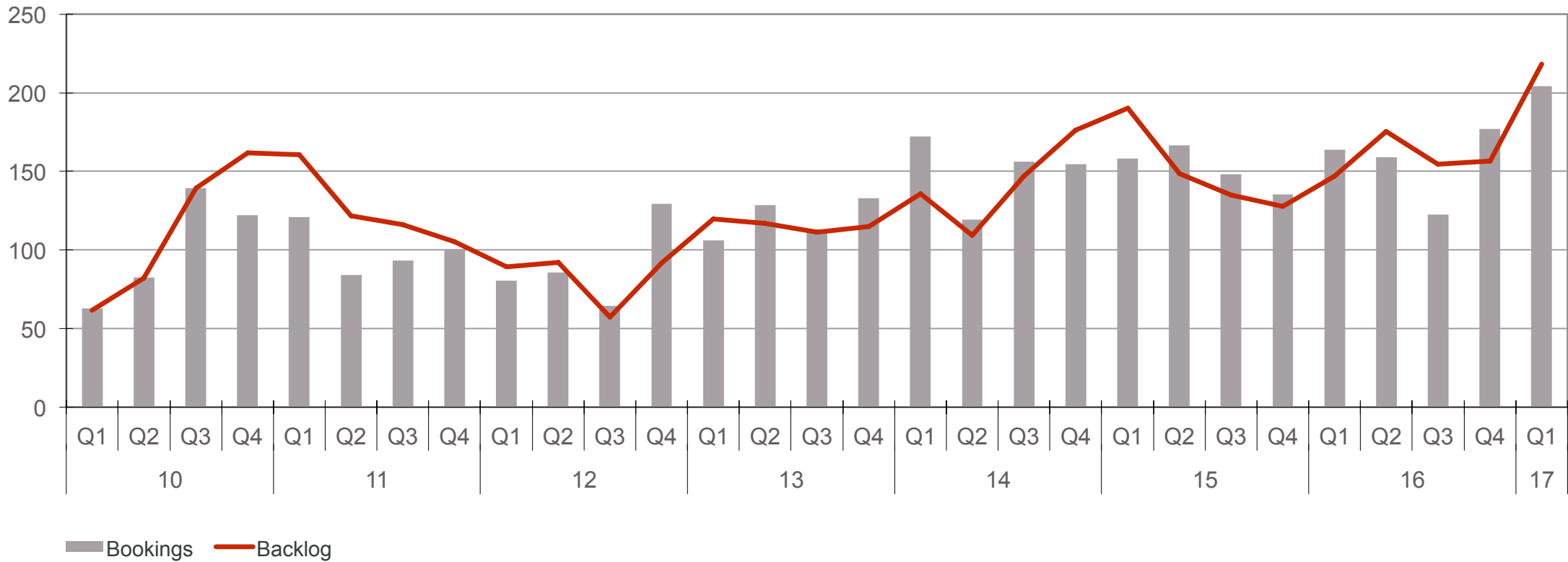
EUR million	FULL YEAR 2015	FULL YEAR 2016	Q1 2016	Q1 2017
Normalized net result	185	163	12	42
Depreciation, amortization and impairments	54	52	12	12
Working capital	3	(56)	(9)	14
Result from investments	(44)	(68)	(6)	(35)
Other adjustments	<u>(23)</u>	<u>-</u>	<u>(2)</u>	<u>-</u>
Net cash from operating activities	175	91	7	33
Dividend received from investments	43	22	-	-
Capitalized development expenditure	(30)	(27)	(7)	(7)
Capital expenditure and other	(40)	(33)	(7)	(7)
Net cash from investing activities	(29)	(38)	(14)	(14)
Net cash from financing activities	<u>(105)</u>	<u>(126)</u>	<u>(24)</u>	<u>(24)</u>
Net cash (used) provided	<u>41</u>	<u>(65)</u>	<u>(30)</u>	<u>(4)</u>

HISTORICAL DEVELOPMENT – ASMI



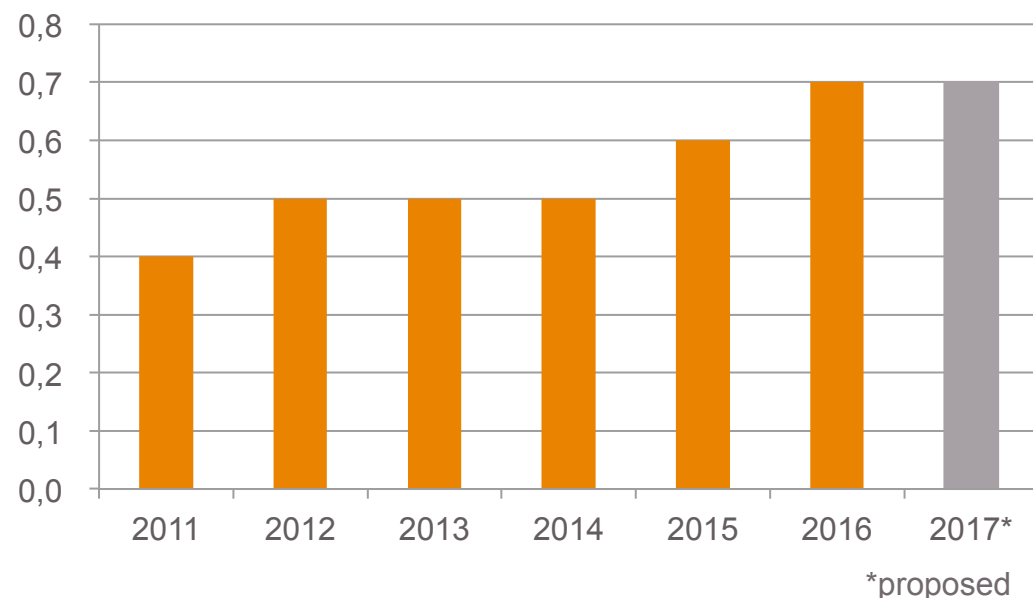
BOOKINGS & BACKLOG – ASMI

(EUR million)

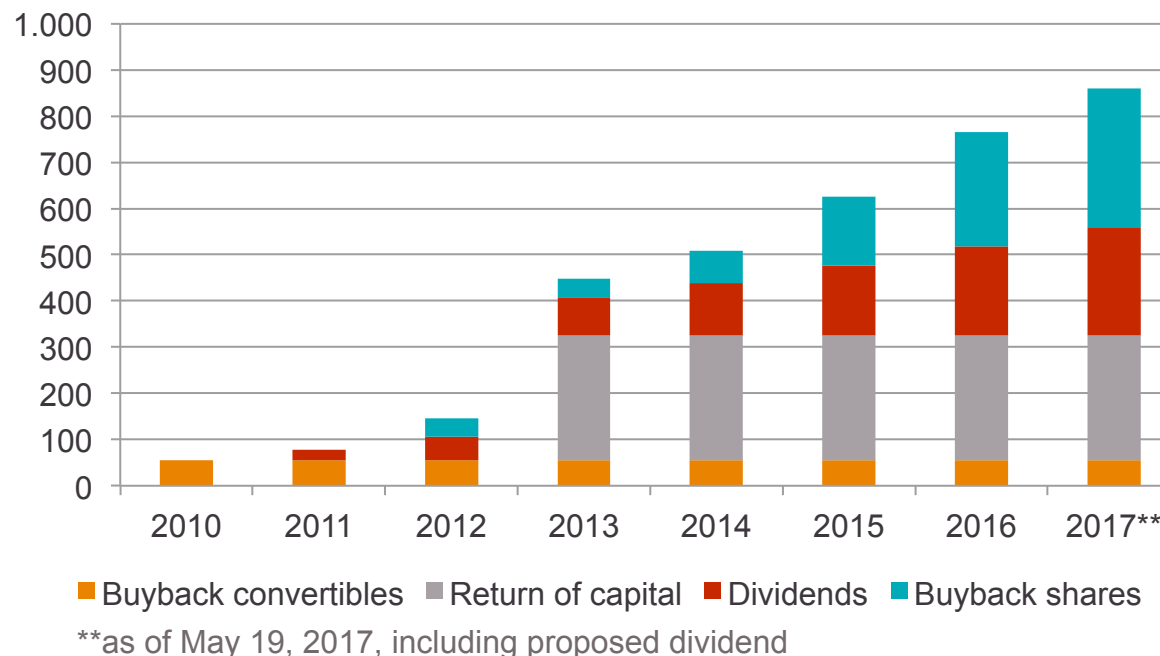


- › Proposed dividend stable at €0.70 per share
- › Third share buyback announced last October, increased to €100 million last March
 - To be executed in 2016/2017 timeframe; 61% completed as of May 19, 2017
 - As part of commitment to use excess cash for the benefit of shareholders

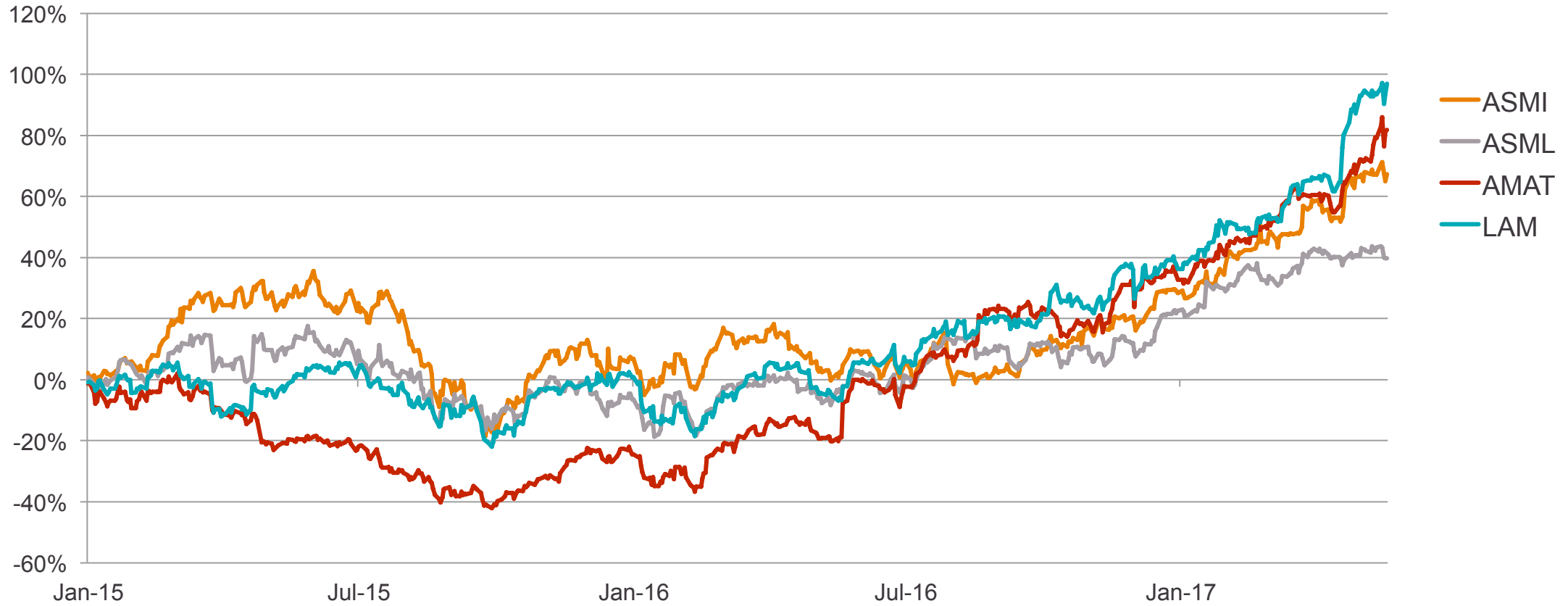
DIVIDEND PER SHARE PAID (EUR)



CUMULATIVE CASH RETURNED TO MARKET '10-'17 YTD (EUR M)



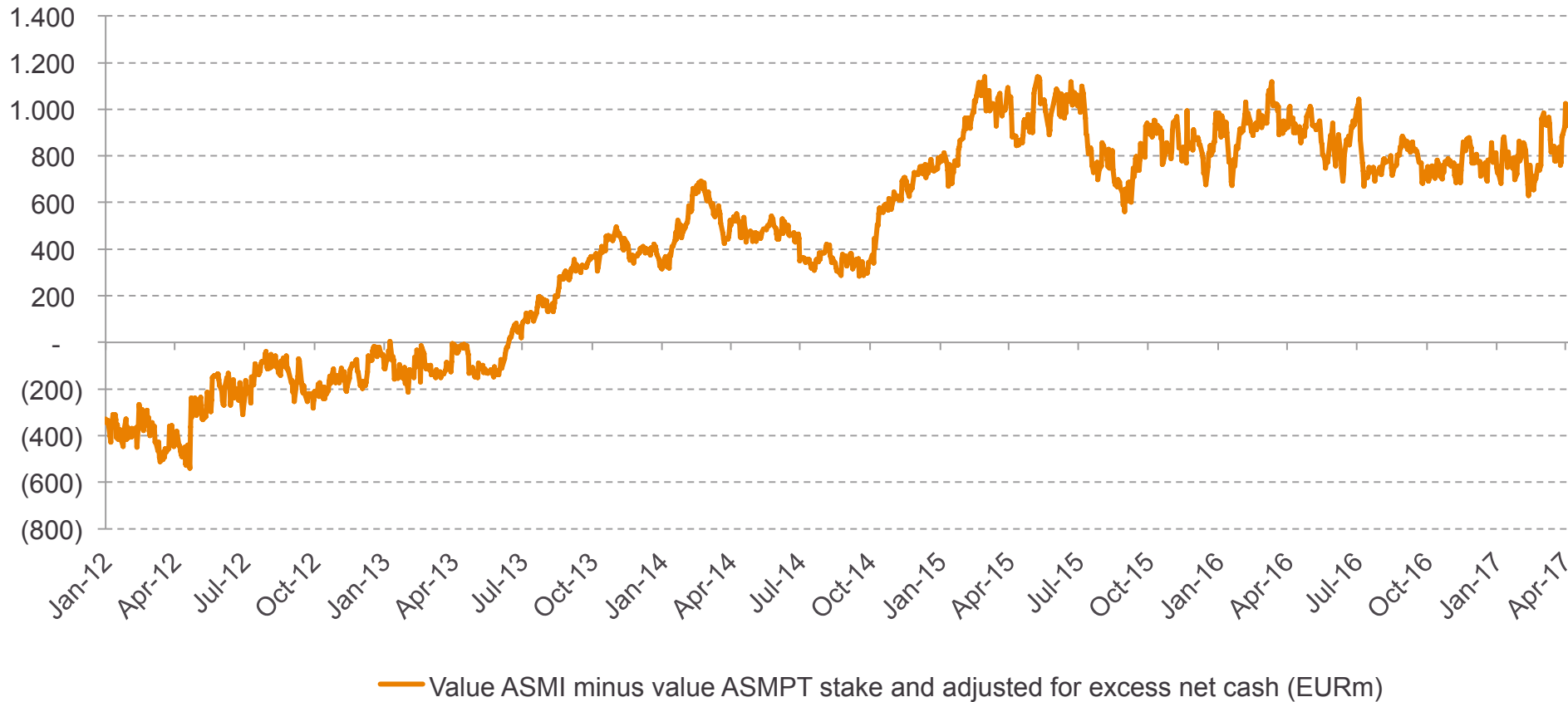
TOTAL SHAREHOLDER RETURN IN 2015-2016



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

IMPLIED VALUE FRONT-END

(EUR million)



- › Strong increase in implied value to €1.0 billion positive up from €400-500 million negative in May 2012

SHAREHOLDING IN ASMPT REDUCED FROM 39% TO 34%

- › On April 24, 2017, ASMI sold a 5% stake in ASMPT for proceeds of approximately €248 million
20 million shares in ASMPT were placed at a price of HK\$105 per share through an accelerate bookbuild offering
- › Proceeds will be used for a new share buyback program
In addition to existing 2016/2017 buyback program
- › The Management Board regularly reviews ASMI's stake in ASMPT. The most recent review led to the conclusion that a further reduction of approximately 5% was justified
- › Management strongly believes that, at this moment, a significant stake in ASMPT remains of strategic value for the company and an important factor towards long term value creation
- › ASMI continues to be the largest shareholder in ASMPT

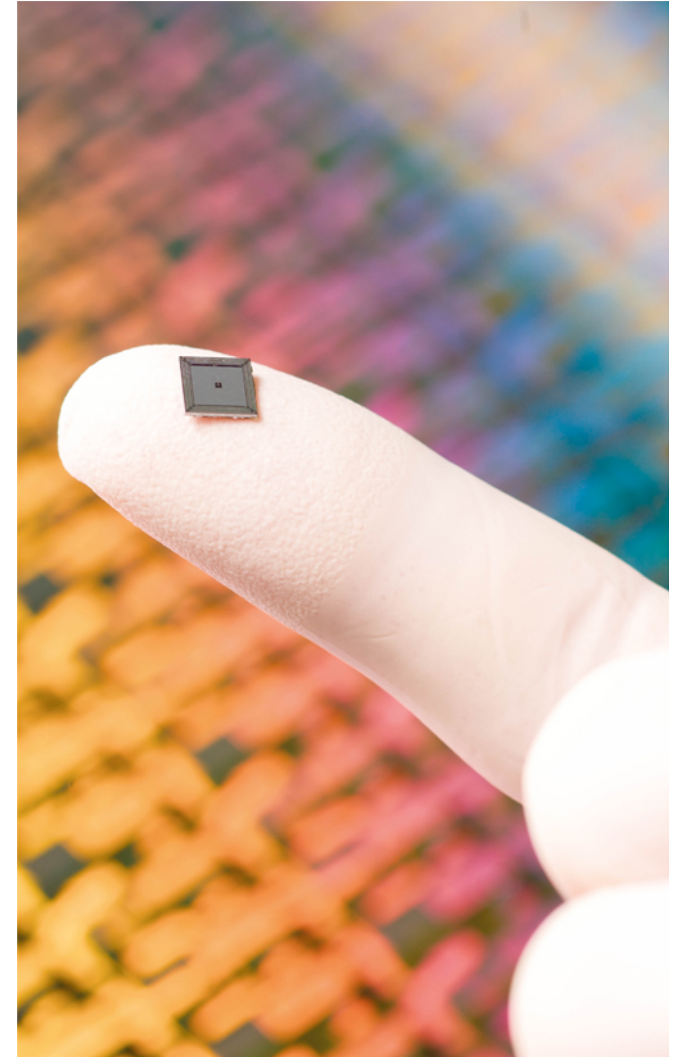
SHAREHOLDING IN ASMPT

	FULL YEAR 2015	FULL YEAR 2016	Q1 2017
Sales ASMPT (HK\$ million)	12,977	14,249	3,761
Gross margin ASMPT	36.3%	37.6%	39.9%
Reported net results ASMPT (HK\$ million)	953	1,438	729
ASMI's share of ASMPT's net results* (EUR million)	44	68	35

* Excluding amortization resulting from the 12% stake sale in 2013

- › As of 15 March 2013, our share 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 and 2016

- › ASMPT's multiple applications strategy pays off
 - Further increased number 1 position in Back-end market in last few years
 - Leading positions in attractive growth markets such as CMOS image sensor equipment, LED and Automotive
- › SMT Solutions transformed into second growth engine
 - Increased market share to 20%+ compared to 13% in 2011
 - Expanded portfolio into SMT printers and wafer level fan-out solutions
- › Focus on innovation
 - E.g. Strongly expanding range of Advanced Packaging solutions
- › Strongly improved manufacturing model
 - Increased use of subcontractors and outsourcing
 - More stable gross margin



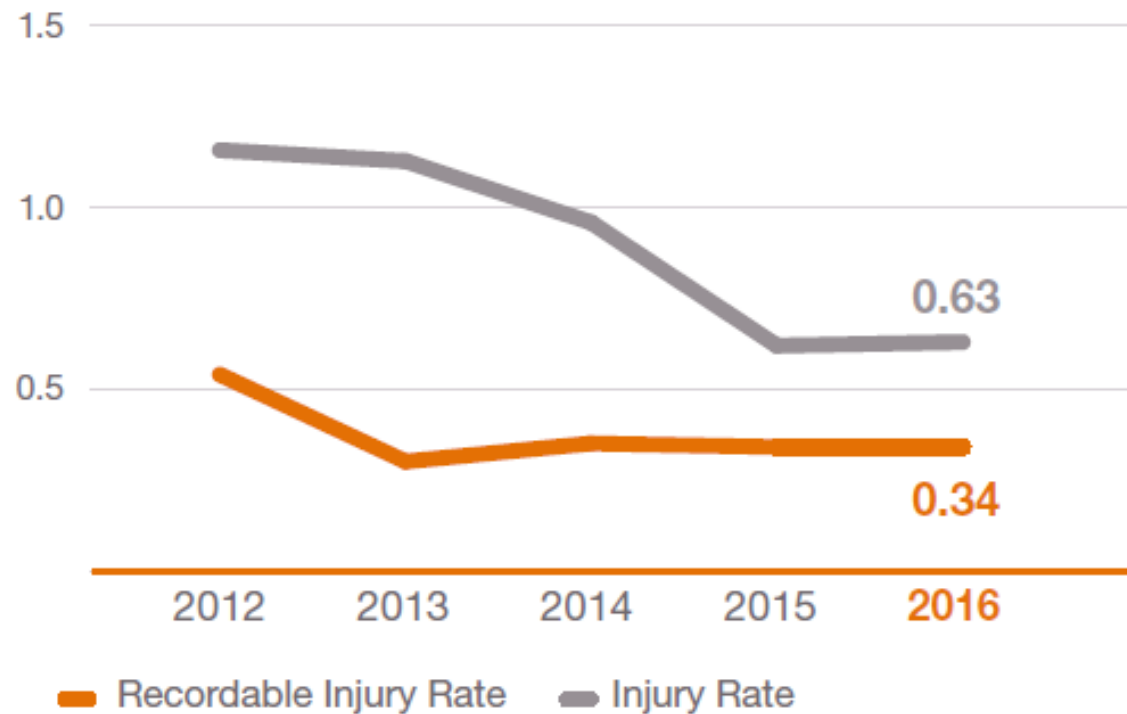
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- › **Corporate responsibility**
- › Products & business highlights
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- › Published third annual Corporate responsibility (CR) report, showing a strong improvement in the Transparency Benchmark
- › **Safety:** good progress recognized by Intel award
- › **Environmental performance:** new 5-year goals defined, strong progress in realization of goals
- › **Labor:** strengthened structural control of working hours in manufacturing and service delivery
- › **Supply Chain:** 90% of critical suppliers acknowledged commitment to our Supplier Code of Conduct



GLOBAL INJURY AND RECORDABLE RATES



- › 2016 Injury rates equal 2015 record lows, defining further actions in our goal to achieve **Zero Harm!**
- › Safety design significantly strengthened
- › Identified and structurally reduced key risks across the Service, Engineering Lab and Manufacturing organization

> Commenced five-year plan (2016-2020) against 2015 baseline

GREENHOUSE GAS (GHG) EMISSIONS

Reduction from 2015
4.4%

2020
Target **5%**

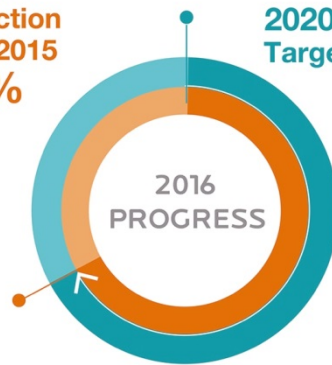


Metric tons of CO₂ equivalents (mtCO₂e) per R&D investment (EUR)

WATER CONSUMPTION

Reduction from 2015
6.7%

2020
Target **10%**

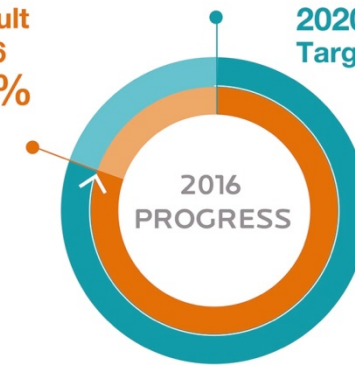


Cubic meters (m³) of water per R&D investment (EUR)

LANDFILL DIVERSION RATE

Result 2016
72%

2020
Target **>90%**



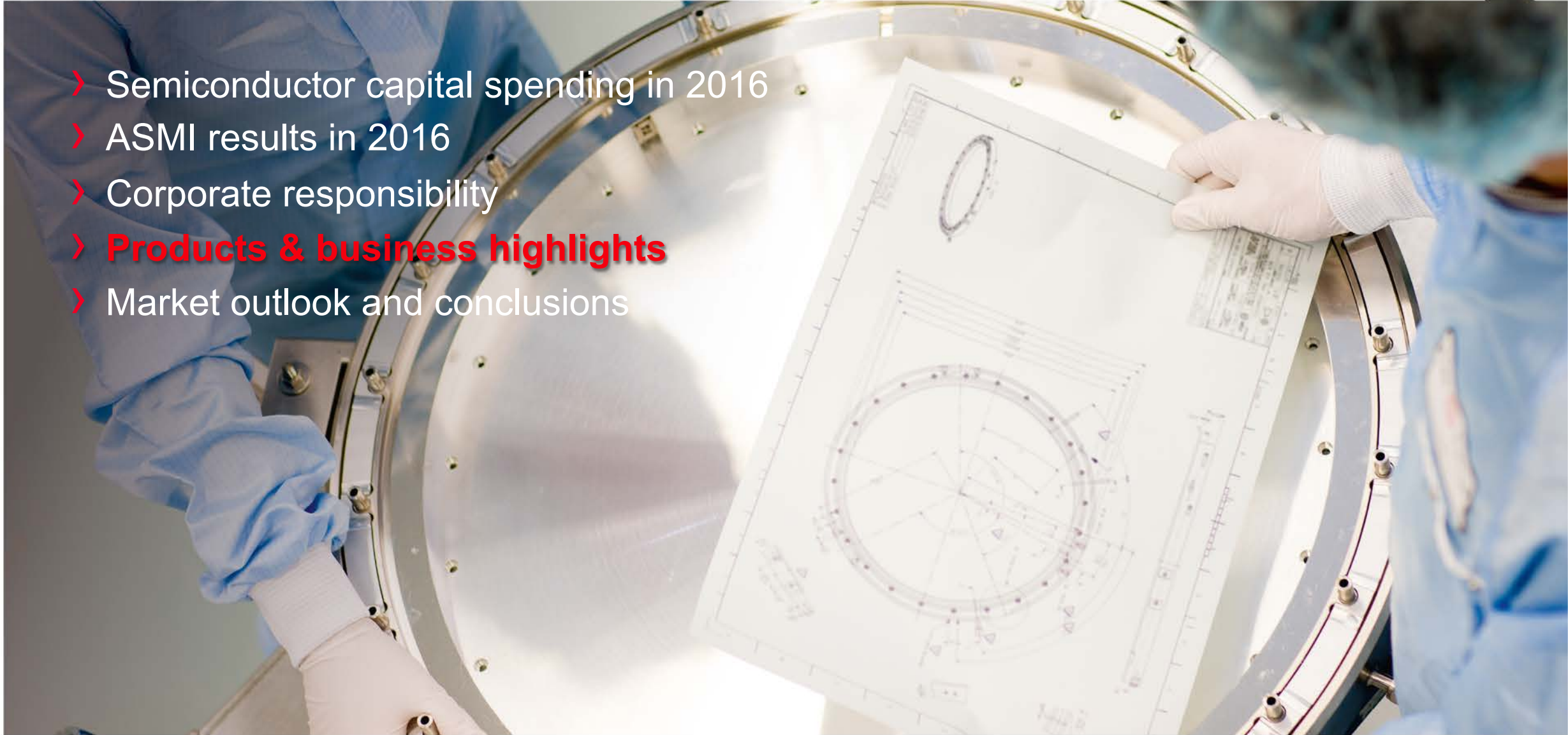
Percent of solid waste diverted from landfill through recycle or reuse

> 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
- Divert more than 90% of all waste from landfill through recycle or reuse by 2020;
- New construction projects exceed energy efficiency standards of local jurisdictions

OUTLINE

- › Semiconductor capital spending in 2016
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ASM has a leading position in ALD

- ALD for high-k metal gates
- ALD spacers for multiple patterning (Memory & Logic)
- ALD liner films for Logic/Foundry and 3DNAND

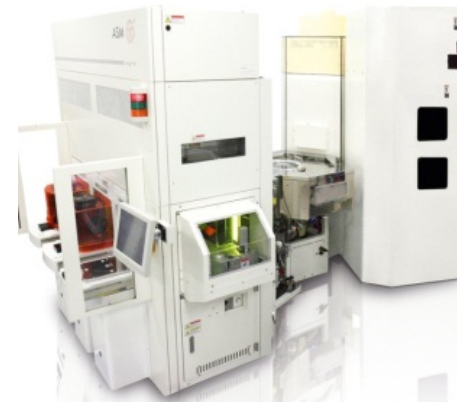
ASM Epitaxy

- New Epi business for advanced node transistors (Foundry)
- Strong Epi position in Analog & Power

PECVD

- Low-k supplier for 7th consecutive Logic device node
- PECVD growing opportunities on XP8 platform

Vertical furnace increased business for More-than-Moore apps



Intrepid XP Epitaxy



XP8 ALD, PECVD



Pulsar XP ALD high-k



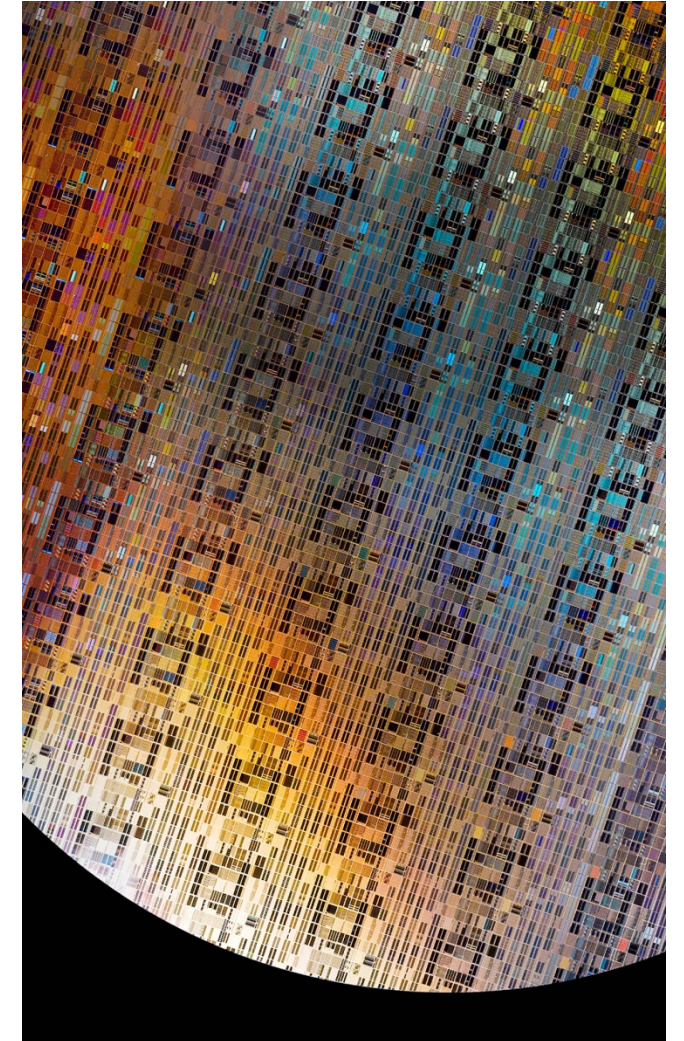
**EmerALD XP
ALD metal gate**



**A412 vertical
furnace**

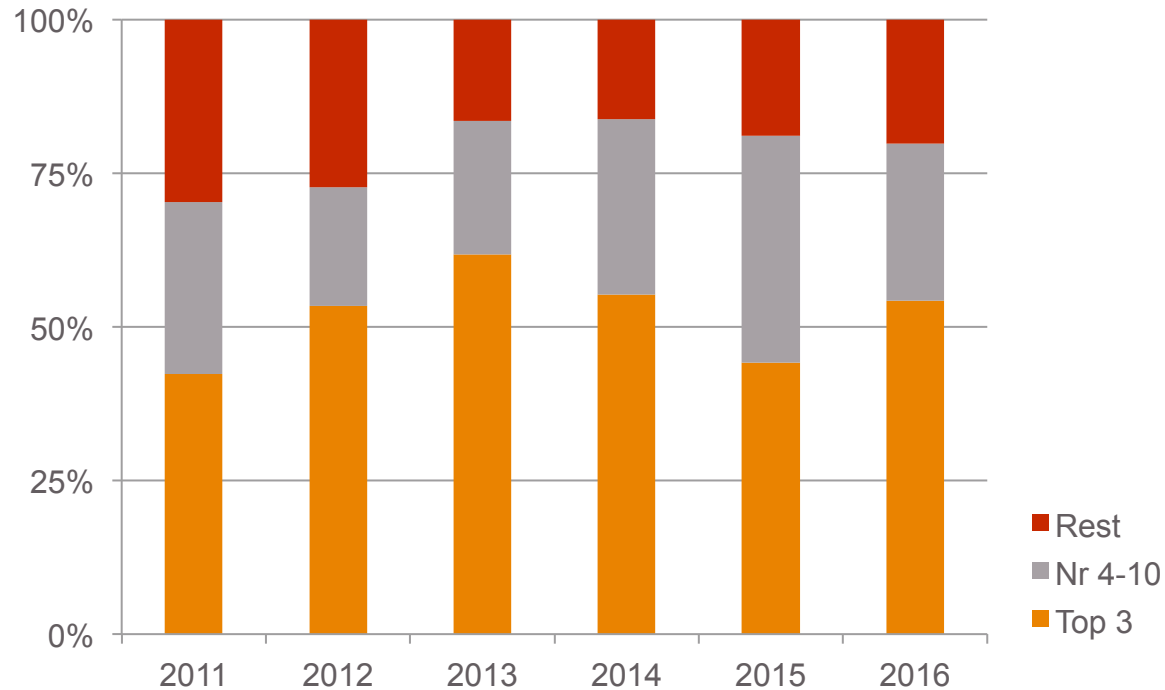
HEADLINES SINCE THE LAST AGM

- › In 2016, the single wafer ALD market showed a drop as lower demand in Memory was only partially offset by strong Logic/Foundry demand
- › Our penetration in Logic/Foundry substantially increased with ramp of 10nm node
- › Received TSMC ALD equipment and technology supplier excellence award
- › Further strengthened R&D engagements with key customers
- › First HVM orders in 3D-NAND segment in 2016
- › Invested in broadening presence in Epi market
First high volume manufacturing order intake for Intrepid EPI in mainstream CMOS



GROWING WALLET SHARE WITH TOP CLIENTS

ASMI REVENUE

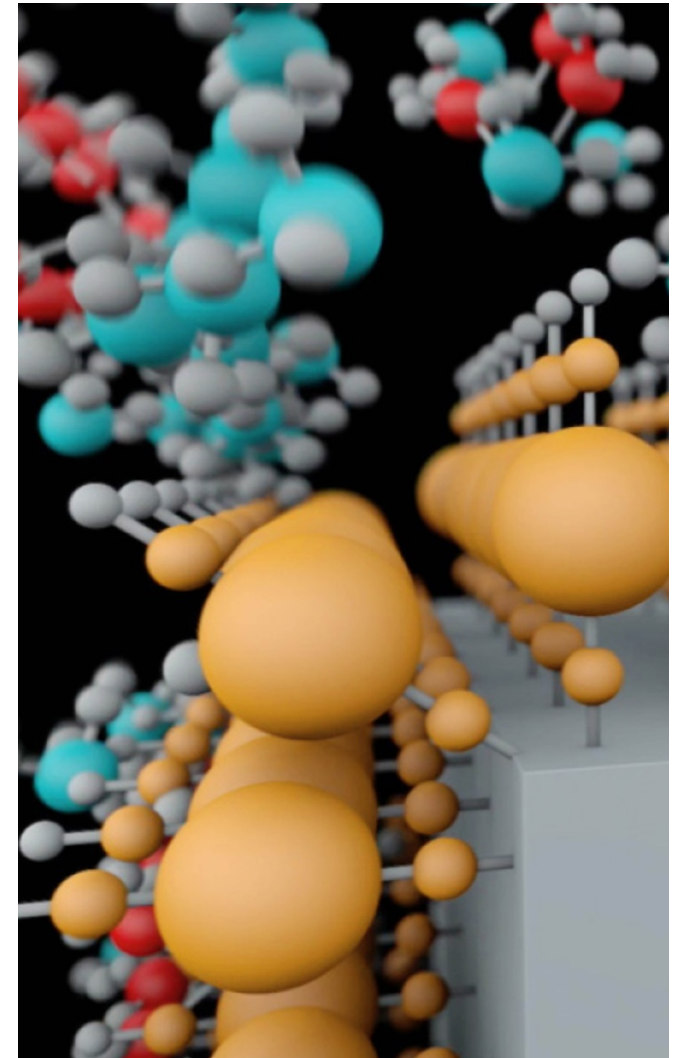


Growing share
of wallet with
top clients

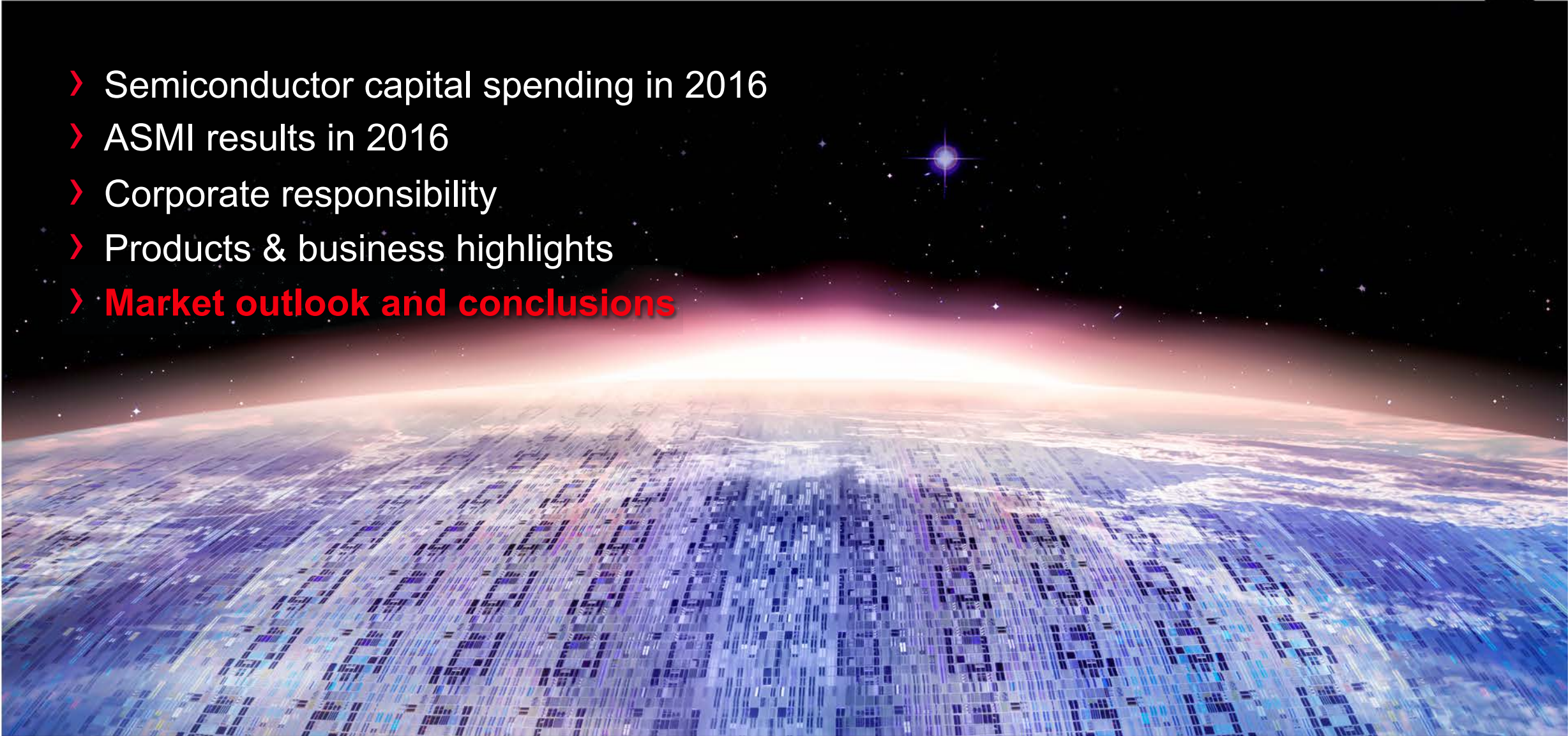
- › Engaged with all of the top-10 semiconductor capital equipment spenders
- › Increase in contribution top-3 in 2016 driven by Logic/Foundry

ALD IS AN ESSENTIAL DEPOSITION EQUIPMENT SEGMENT

- › Following a decrease in 2016, the company expects a clear year-on-year improvement in the single wafer ALD market for 2017
- › The company expects the single wafer ALD market will grow to reach a size of approximately US\$1.5 billion in 2020-2021
- › 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



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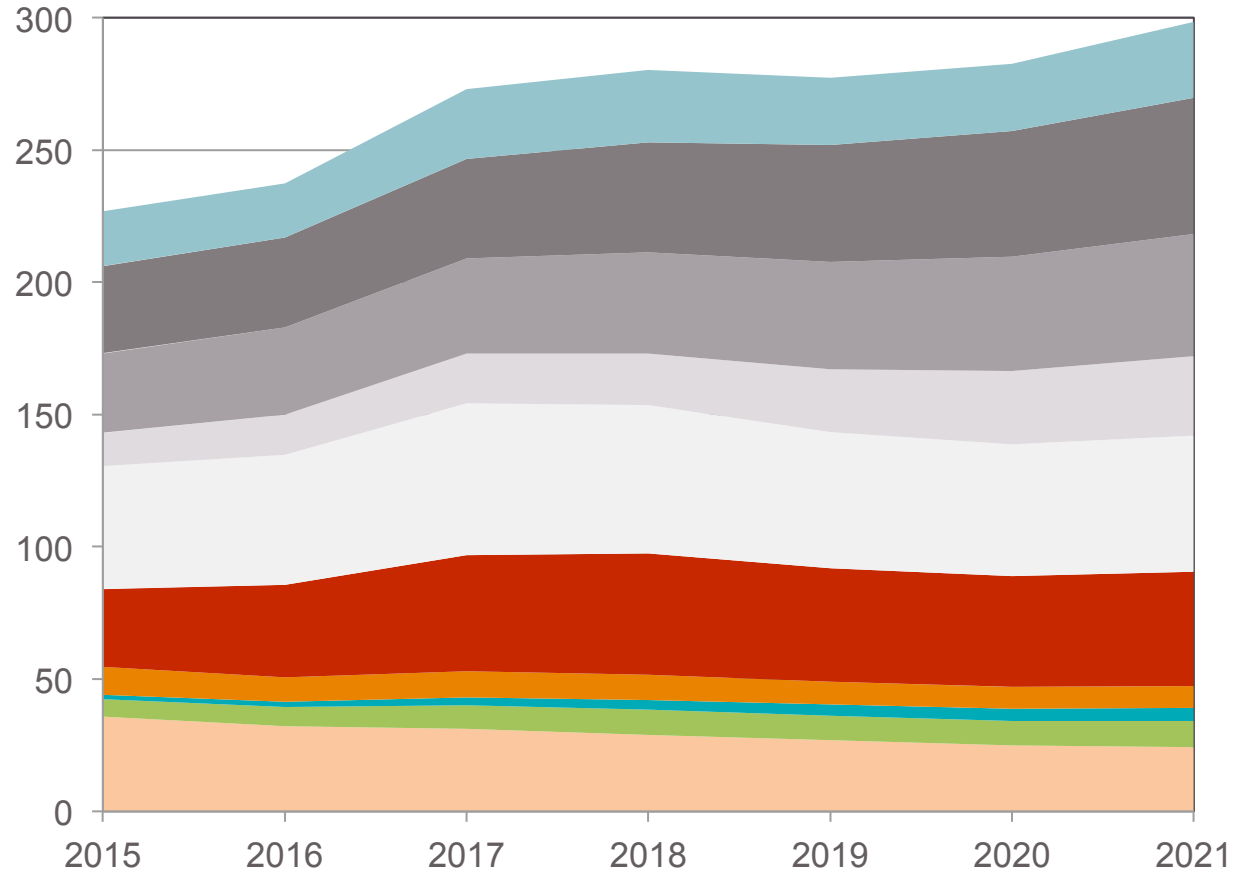
SEMICONDUCTOR GROWTH DRIVERS

SEMICONDUCTOR SALES BY KEY APPLICATION

US\$bn

Source: Gartner, Mar 2017

CAGR '16-21

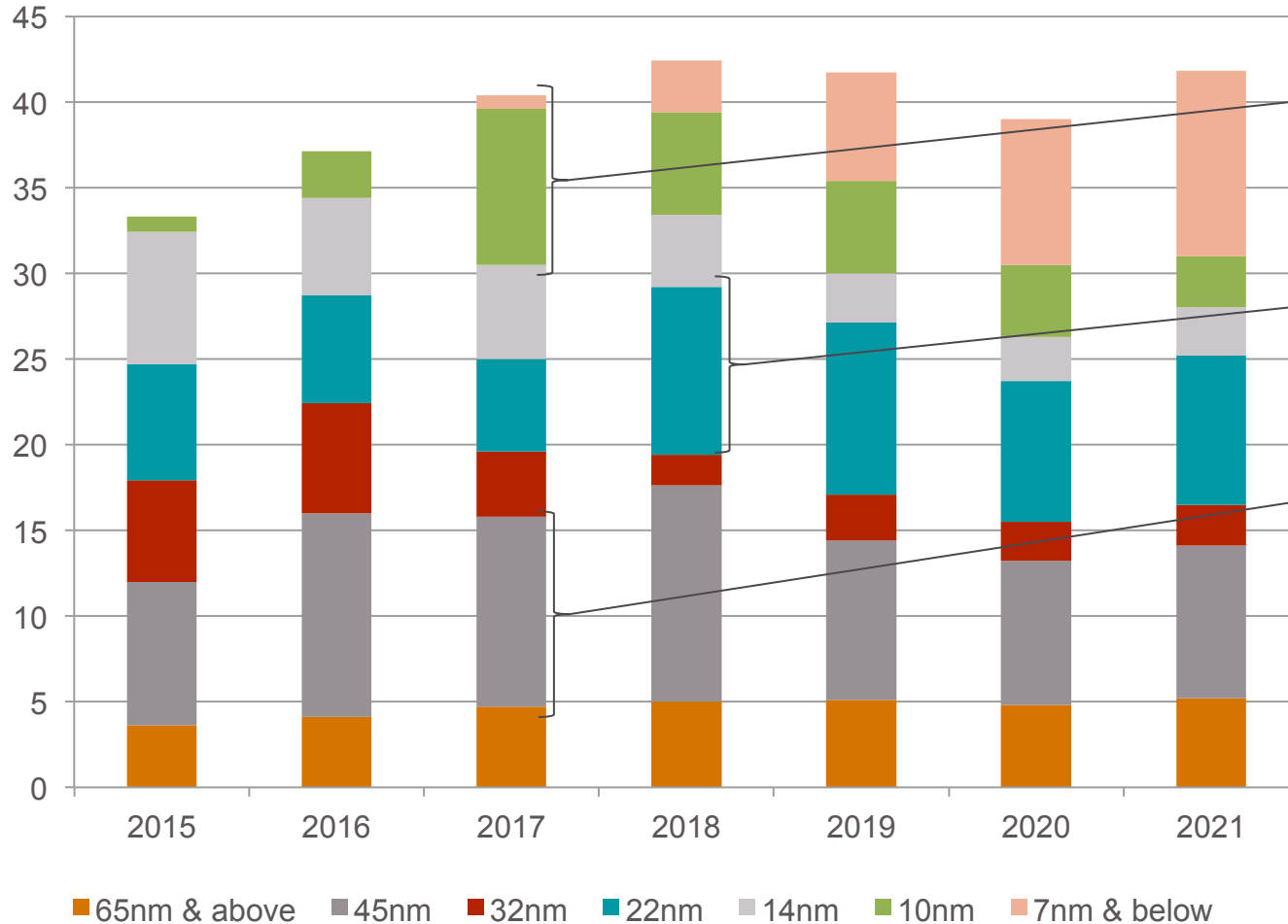


Servers	+7%
Industrial Electronics	+9%
Automotive	+7%
Solid State Drives	+15%
Smartphone Premium	+1%
Smartphone Basic	+4%
Tablet	-2%
PC / Tablet Hybrid	+17%
PC Ultramobile Clamshell	+7%
PC Desktop & Notebook	-6%

Semiconductor drivers are mobile devices, but long term growth rate is slowing.

New semi growth drivers are solid state drives, servers, automotive and industrial.

WAFER FAB EQUIPMENT BY TECHNOLOGY NODE



Logic/Foundry 10nm ramp in 2017-2018 and then transition to 7nm

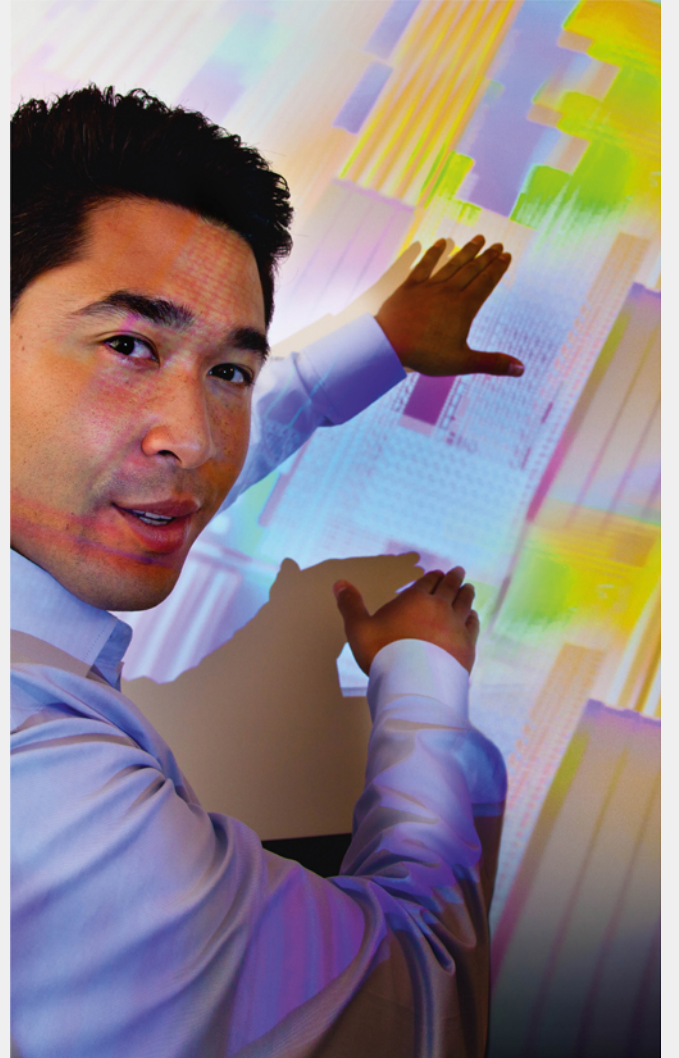
DRAM expansion in 2018 for 2X and 1X/1Y nodes

3D-NAND expansion continues 2017-2018

Source: Gartner, April 2017

Based upon the current backlog and our current visibility:

- › For Q2 we expect a sales level of €180-200 million, on a currency comparable level.
- › The order intake in Q2 is expected to remain at a high level of €190-210 million, also on a currency comparable level.



- › **Due to a drop in the single wafer ALD market our revenue decreased by 11% in 2016**

For 2017, a clear improvement in the single wafer ALD market is expected

- › **Gross margin stable at 44%, operating expenses under control**

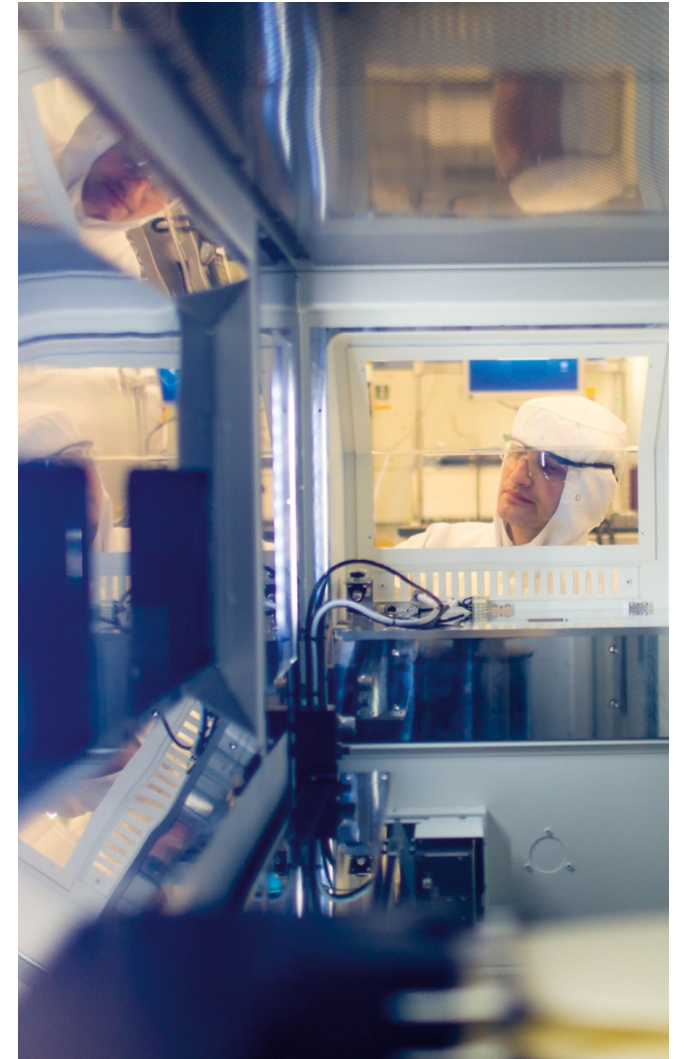
- › **Strategic achievements during the year**

- Strong expansion with Logic/Foundry customers
- First HVM orders in the 3D-NAND segment
- First steps into mainstream CMOS Epi market

- › **Further progress Corporate responsibility**

Our Transparency Benchmark score more than doubled from 2015 to 2016

- › **The company believes to be well positioned for an increased number of ALD applications in the next technology nodes**



A nighttime photograph of a city skyline, likely Hong Kong, with numerous skyscrapers illuminated. The foreground is dominated by a large, tilted map of the city, showing street grids and building footprints. Two thick red arrows point from the right towards the text.

CONNECTING THE DOTS