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SHAREHOLDERS INFORMATION

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CHAPTER PREVIEW

The worldwide demand for smaller, faster and cheaper semiconductor chips continues, as the move to digitalization drives greater automation.

MEETING DEMAND

We are helping to meet this demand by focusing on our innovative strength and building on our world-leading ALD performance, while expanding our advanced epitaxy and PECVD capabilities.

DELIVERING RESULTS

In 2017, our focus on innovation and continuing to develop our strengths enabled us to deliver compelling solutions for a number of applications in the growing ALD sector, and introduce new solutions in the epitaxy market. It also contributed to our strong financial results, which included:

- › Net sales of €737 million
- › Bookings of €774 million
- › Operating result of €113 million
- › Operating cash flow of €116 million

MESSAGE FROM THE CEO

In 2017 we achieved significant progress against our strategic targets. Our sales benefited from a clear recovery in the single-wafer Atomic Layer Deposition (ALD) market, in particular driven by strong increases in the 3D-NAND segment. During the year we also successfully expanded our position in the epitaxy market with an important tool win from a leading foundry customer. In total, our revenue increased by 23% to a new record level.



CHARLES D. (CHUCK) DEL PRADO

Chairman of the Management Board,
President and Chief Executive Officer

Our achievements would not be meaningful if we did not achieve them responsibly. We continue to focus on improving the way we do business responsibly, in our operations, in our supply chain, and with our stakeholders. As of this report, we no longer report Corporate Responsibility separate from our Annual Report. This report is yet another step in further integrating our responsible business practices into our strategies and the value we bring to society.

“IN 2017, FOR THE FIRST TIME, 3D-NAND ACCOUNTED FOR A SOLID DOUBLE DIGIT PERCENTAGE OF OUR TOTAL COMPANY SALES.”

RECOVERY IN OUR ALD BUSINESS

2017 was a year of strong growth for our industry. Worldwide semiconductor industry sales increased by more than 20% and were for a large part driven by favorable market conditions and price increases in the memory segments. The market for Wafer Fab Equipment (WFE) grew by approximately 30%. The growth in equipment spending was primarily driven by memory customers who invested in 3D-NAND capacity expansion, and by higher spending in upgrading existing capacity to advanced DRAM nodes. The logic/foundry segment of the WFE market was relatively stable in 2017.

Against this positive industry backdrop, the market for single-wafer ALD equipment showed a clear recovery in 2017. 3D-NAND was the main driver of the growth in the single-wafer ALD market in 2017 and it was also the main driver of growth in our ALD sales. In 2017, for the first time, 3D-NAND accounted for a solid double digit percentage of our total company sales.

Last year, we reduced our shareholding in ASML from approximately 39% to approximately 25% with the proceeds being used for share buyback programs and a proposed return of capital to our shareholders.

We continue to invest in new precision deposition applications that help our customers to transition to the next generations of ever faster and more power-efficient semiconductor devices. Our company remains well positioned for long-term value creation for all stakeholders.

After the drop in 2016, our DRAM business remained at a relatively low level in 2017. Our DRAM business failed to show the recovery in 2017 that we had expected earlier in the year. Investments by DRAM customers increased in 2017 but were mainly made within existing fabs with more reuse of existing equipment as a result. This had a negative impact on the demand for new single-wafer ALD patterning tools in particular. However, in the latter part of 2017 the first signs appeared of renewed capacity additions in the DRAM segment, which are likely to drive demand for new ALD patterning tools in the course of 2018.

In the logic/foundry segment of the single-wafer ALD market demand remained at a healthy level in 2017 following the strong sales increase that we achieved in 2016. Our customers in this segment continued to invest in the 10nm node and also made their first early investments in the next 7nm node. Single-wafer ALD is essential for several new critical process steps to build these advanced devices. During the year we achieved tool-of-record selections for multiple new ALD applications for the 7nm logic/foundry node. We expect that these new applications will further increase our addressable market for ALD.

SUCCESSFUL EXPANSION IN EPITAXY

Another highlight of 2017 was the launch of our new epitaxy tool, the Intrepid ES. The benefits of this tool versus our earlier Intrepid tool, include amongst others substantially improved temperature control capabilities which enables both enhanced process control and increased productivity. In April 2017, we announced that we won our first process tool-of-record selection for the Intrepid ES for an advanced epitaxy application at a leading foundry customer. With the successful launch of the Intrepid ES we are substantially increasing our addressable market in epitaxy. In earlier years we were mainly focused on the market segment for power and analog epitaxy applications. With the Intrepid ES we now also target advanced-node applications in logic/foundry and memory, which form the largest part of the epitaxy market.

The new customer win for our Intrepid ES tool drove a strong increase in our epitaxy sales in 2017, which approximately doubled compared to a lower base in 2016. Epitaxy is expected to be an attractive growth market, as it is a key technology that helps our customers to improve the transistor performance of their next generation devices. In addition, a stronger position in epitaxy will help us to further broaden our relationships with key customers and it will also provide a stronger and more diversified base to our revenue stream.

As part of our growth strategy we also invest selectively in other parts of our portfolio, next to ALD and epitaxy, where our solutions can make a difference for our customers. In 2017, this resulted in a new

win in our Plasma Enhanced CVD (PECVD) activity in the 3D-NAND market, which also contributed to our revenue growth last year.

POSITIONED FOR GROWTH IN 2018

Since 2010 we have grown our sales with an average annual growth rate of 14%. This compares to an average annual increase of about 6% (source: Gartner) for the WFE market over the same period. The outlook for our industry this year looks healthy. For 2018, market watchers currently expect the WFE market to increase with, on average, a high single-digit percentage. We aim to outgrow the WFE market in 2018.

In our ALD activities we target an increase in our DRAM related activities. An expected increase in new DRAM capacity investments will likely drive some improvement in demand for new ALD patterning tools. In addition, we have been broadening our R&D-scope in the DRAM ALD market beyond applications in patterning, for which we expect the first results in 2019. We also expect to benefit from continued investments in the 10nm/7nm logic/foundry market. In 3D-NAND, we are focused on serving the current volume ramps at the 3D-NAND manufacturers and to position our company for a broader participation in this space.

“ANOTHER HIGHLIGHT OF 2017 WAS THE LAUNCH OF OUR NEW EPITAXY TOOL, THE INTREPID ES.”

For our product in epitaxy we expect traction to remain strong in 2018. As far as our other products PECVD and Vertical Furnace are concerned, we continue to invest in selected parts of these activities, which we expect will create growth opportunities in 2018. From a geographical point of view, we expect a higher sales contribution from China in 2018 following our investment to increase our presence in this market and as local Chinese customers are preparing for higher investments in more advanced technology nodes.

PROGRESS IN STRATEGIC FOCUS AREAS

Our overall progress in operational excellence is also recognized by our customers and positions us well to continue to compete effectively in the future. Last December, ASMI received an Excellent Performance Award from TSMC, as one of seven equipment suppliers, in recognition of our technology and performance in development and production at TSMC fabs. This follows the award that we received from TSMC in February 2017 for the innovation, performance and support of ASMI's ALD equipment and technology.

“IN MARCH OF 2018, WE RECEIVED INTEL’S PREFERRED QUALITY SUPPLIER (PQS) AWARD FOR OUR PERFORMANCE ACROSS 2017.”

In March of 2018, we were recognized by Intel as a recipient of their Preferred Quality Supplier (PQS) award for our performance across 2017. The PQS award, the 2nd PQS win for ASMI, recognizes companies like ASMI that Intel believes have relentlessly pursued excellence and conducted business with resolute professionalism. The PQS award celebrates exceptional, persistent performance and the continuous pursuit of excellence.

ASMPT STAKE REDUCED TO 25%

During 2017 we reduced our shareholding in ASMPT in two steps from approximately 39% to approximately 25%, which we believe will further drive the long-term value of our company. In April 2017 we sold a 4.9% stake for proceeds of approximately €245 million and last November we sold another 9.1% stake for proceeds of approximately €445 million. We announced plans to use the proceeds of these two stake sales for share buybacks and also for a proposed return of capital to our shareholders.

In 2017, our shareholding in ASMPT contributed solidly to our net earnings. Normalized result from investments, which includes the contribution from ASMPT, increased by 66% to €112 million. ASMPT's sales growth accelerated from 10% in 2016 to 23% in 2017. In Back-end equipment, the company performed very well in segments such as Back-end equipment for CMOS image sensors, power management and advanced packaging. In addition, ASMPT's surface mount technology (SMT)

solutions recorded particularly strong growth driven by automotive and industrial electronics and the latest upgrade cycle in the smartphone market. Based on its leading positions and diversified portfolio we believe ASMPT stands to benefit from broad-based market drivers.

FINANCIAL PERFORMANCE

With the recovery in our ALD business and a strongly increased contribution from our epitaxy and PECVD activities, our revenue increased by 23% in 2017 to a new record high. Our gross margins decreased from 44.2% to 41.5%, which is explained by the temporary effect of initial costs related to new epitaxy and PECVD product launches. With operating expenses remaining under control, our operating profit increased 38% to €113 million.

Our key priority is to maintain a strong balance sheet that enables us to continue investing in the growth of our business. Our commitment to use excess cash for the benefit of our shareholders remains unchanged. During 2017 we completed our third consecutive €100 million share buyback program. Furthermore, using the proceeds of the ASMPT stake sale of April 2017 we launched a new €250 million buyback program that was started in September 2017 and was for 97% complete per March 9, 2018. In addition, with the publication of our fourth quarter 2017 results we announced that we intend to use part of the proceeds of the ASMPT stake sale of November 2017 for a proposed tax-efficient return of capital of €4 per share to our shareholders, for a total amount of approximately €220 million. Moreover, we also announced that we plan to use €250 million for a new share buyback program. We will also propose to the Annual General Meeting of Shareholders 2018 an ordinary dividend of €0.80 per share, which is an increase of 14% compared to the dividend paid in 2017.

CORPORATE RESPONSIBILITY

Our strategy continues to focus on further integrating Corporate Responsibility across all areas of our business, and we are well aligned with the United Nations Sustainable Development Goals (SDG). Our progress and results in 2017 are correlated with the SDG goals in the areas of Gender Equality, Decent Work and Economic Growth, Industry Innovation and Infrastructure, Responsible Consumption and Production, and Climate Action. Our contributions to these global goals are shared throughout this report.

SOLID LONG-TERM PROSPECTS

We remain focused on supporting our customers in their relentless push to follow Moore's Law. ALD is now firmly established as a key enabling technology that contributed to the introduction of several device generations in the memory and logic/foundry markets. As our industry moves to the next technology nodes, dimensions further scale and complex 3D device structures and new materials need to be introduced. The technology inflections on the roadmaps of our customers play to the

strengths of ALD as these will drive the need for more precise deposition of ultra-thin and highly conformal films.

The continuous improvement in processing speed, storage capacity, energy efficiency and cost effectiveness of the most advanced semiconductor devices is a driving force behind the creation of new end market applications in areas such as artificial intelligence, cloud computing and IoT. The advances in semiconductor technology to which we contribute are therefore at the heart of new developments in for instance electric autonomous cars, innovations in healthcare and education and more efficient transportation systems, with potentially large benefits for our everyday lives and for society at large.

With an expanding number of applications, we remain confident that the single-wafer ALD market will over time grow as a percentage of the total deposition market. As a leader in ALD, ASMI continues to be well positioned to capture the growth expected in this market. In addition to further growth in our ALD activities, we expect an increased contribution from our epitaxy and PECVD activities. To prepare our company for the next stage of growth we intend to invest in the expansion and upgrading of our

R&D and manufacturing facilities, which will be reflected in a higher level of our capital spending in the period 2017-2019.

We would like to thank our employees for their continued commitment and hard work: together as one ASMI team we have again made progress this year in many critical areas. We are also grateful for the trust of our customers and the continued support of our shareholders. Our focus remains the creation of sustainable value for all our stakeholders.

March 16, 2018

Charles D. (Chuck) del Prado
President and Chief Executive Officer

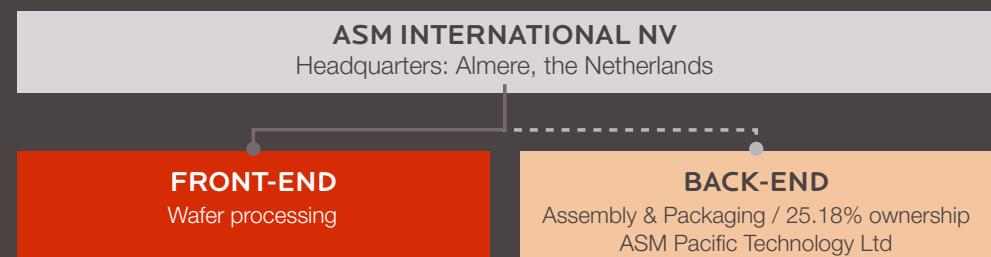
AT A GLANCE

ASM International NV (ASMI) is a leading supplier of semiconductor wafer processing equipment and process solutions. Our customers include all of the top semiconductor device manufacturers in the world. Semiconductor chips sit at the heart of almost every electronic device we use today. They run programs, apps, and operating systems. They connect your television to your wireless internet. Without them, today's society would simply disconnect. And our technology is the first step towards making it all possible.

Our semiconductor process tools enable chip manufacturers to make higher capacity, more powerful, and faster logic processor and memory chips. Our R&D investments lead to new device architectures, new materials, and new processes, together advancing nanotechnology that help us all make connections.

ORGANIZATIONAL STRUCTURE

ASMI has two operating segments, Front-end (wafer processing) and Back-end (assembly and packaging).



BOOKINGS EUR million	NET SALES EUR million	OPERATING RESULT EUR million	RESULT FROM INVESTMENT* EUR million	OPERATING CASH FLOW EUR million	CASH EUR million	EARNINGS PER SHARE* (Diluted) EUR	NET EARNINGS* EUR million
774	737	113	112	116	836	3.21	190
STAFF Employees	EMPLOYEES IN R&D	PATENT FILINGS	PATENTS IN FORCE	GLOBAL INJURY RATE Per 100 employees	GHG EMISSIONS mtCO ₂ e per million R&D investment	WATER CONSUMPTION m ³ per million R&D investment	LANDFILL DIVERSION RATE
1,900	26%	115	1,604	0.62	158	1,559	79%

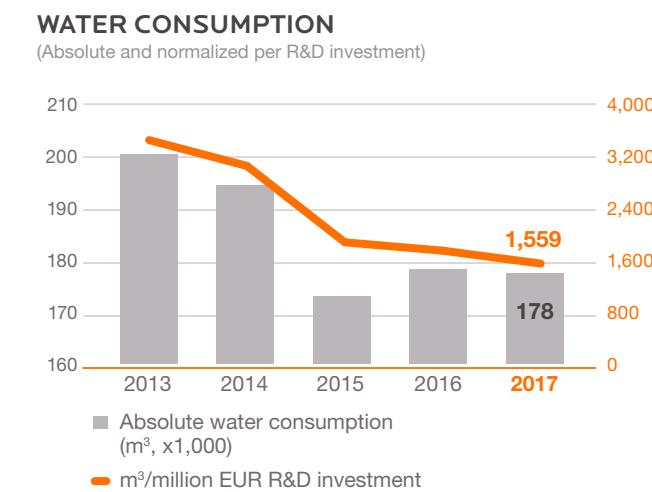
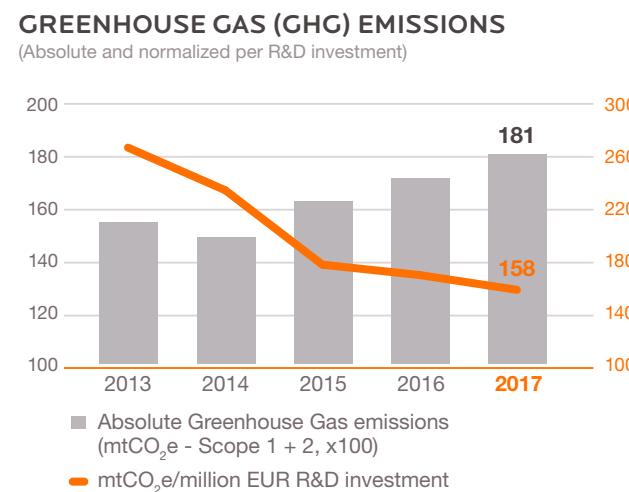
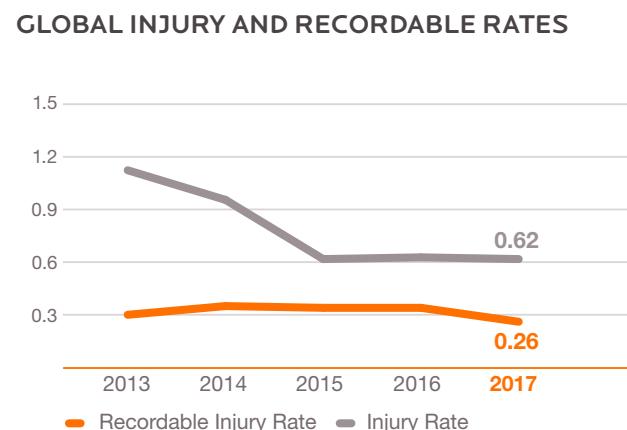
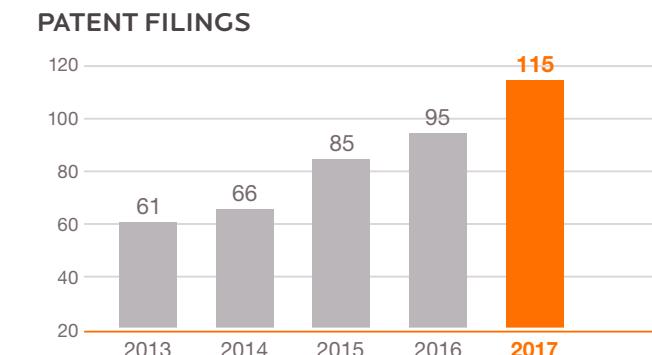
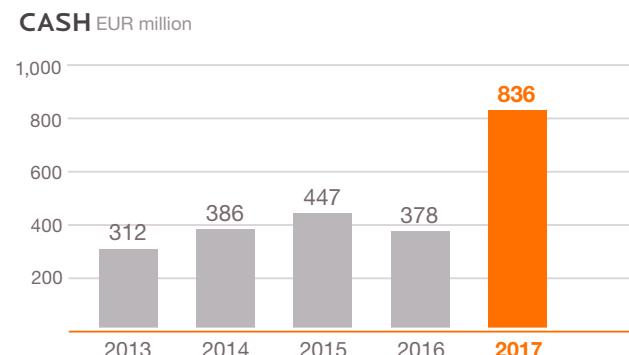
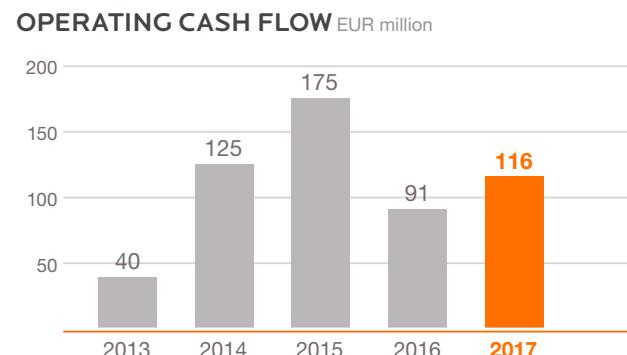
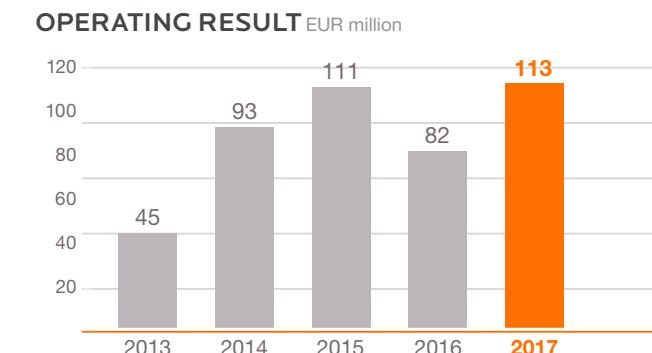
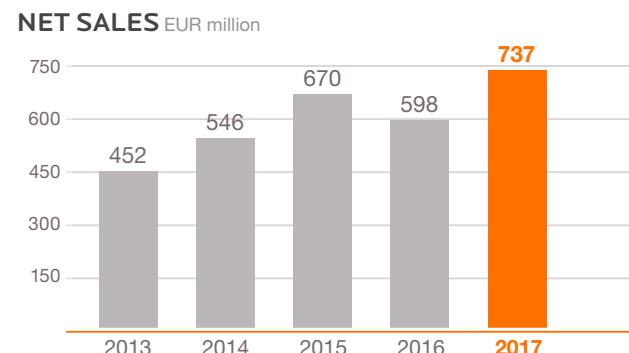
* Excluding effect of sale of ASMPT shares

KEY FIGURES

EUR (million, except per share data and employees)	2013 ³⁾	2014	2015	2016	2017
Operations:					
Net sales					
Front-end	452	546	670	598	737
Back-end	160	—	—	—	—
Result from operations:					
Front-end	45	93	111	82	113
Back-end	(4)	—	—	—	—
Net earnings (loss) from continuing operations	(343)	138	157	135	452
Net earnings (loss) from discontinued operations	1,405	3	—	—	—
NET EARNINGS (LOSS) FROM OPERATIONS	1,062	141	157	135	452
Balance sheet:					
Net working capital ¹⁾	109	108	114	157	180
Total assets	1,608	1,889	2,076	2,131	2,177
Net cash ²⁾	312	386	447	378	836
Backlog:					
Front-end	115	176	128	157	180
Back-end	—	—	—	—	—
Number of staff:					
Employees					
Front-end	1,502	1,635	1,597	1,670	1,900
Back-end	—	—	—	—	—
Per share data:					
Net earnings (loss) on operations per share					
Basic net earnings (loss)	16.81	2.23	2.53	2.23	7.72
Diluted net earnings (loss)	16.55	2.20	2.50	2.21	7.63
Weighted average number of shares used in computing per share amounts (in thousands):					
Basic	63,202	63,558	62,114	60,616	58,573
Diluted	64,196	64,707	62,928	61,253	59,325

¹ Net working capital includes accounts receivable, inventories, other current assets, accounts payable, provision for warranty and accrued expenses and other payables.² Net cash includes cash and cash equivalents less long-term debt and notes payable to banks.³ ASIPT (Back-end) was deconsolidated as from March 15, 2013.

During 2017 we continued to make great progress in a number of key areas highlighted here.



THE WORLD IN WHICH WE OPERATE

The world around us is changing rapidly, as society becomes increasingly automated and connected. We rely on a broad range of connected electronic devices, often called the Internet of Things (IoT), to control our homes, offices, vehicles, and communications.



Due to the expansion of artificial intelligence, these devices are getting smarter, enabling office building environments and public transportation to be optimized in real time, without human interaction. It allows individuals to speak to their electronic personal assistants for guidance, carry out information searches, or to execute tasks. This connected and automated world is creating the demand for massive amounts of data, requiring ever-greater computer processing power and storage, capable of analyzing and acting on the data quickly and effectively. Making this possible requires the processing power of semiconductor chips. And it is our technology that is playing a vital part in making it all possible.

OUR ROLE

We design, manufacture, and sell equipment and services to our customers for the production of semiconductor devices, or integrated circuits (ICs). Semiconductor ICs, often called chips, are a key technology that enable the advanced electronic products used by consumers and businesses everywhere. Our innovative technologies are used by the most advanced semiconductor manufacturers.

Our customers' goal is to build faster, cheaper, and more powerful semiconductors. We work closely with them to make this a reality, forging mutually beneficial partnerships that enable us to help them develop their technology roadmap. At the same time, our customers become expert users of our equipment, and their insights help us to continuously improve our systems, resulting in greater productivity and lower operating costs per wafer, benefiting us, them, and the end consumer. The result is value creation not only for our customers, but for all of our stakeholders.

Collaboration is a vital part of our success, which is why we have developed close ties with many of our stakeholders. For example, we maintain partnerships with technical institutions and universities to carry out cutting-edge research and development (R&D). At the same time, working closely with our suppliers helps us manufacture, service, and sustain our products efficiently.

OUR POSITION IN THE INDUSTRY



COMPLEX PROCESSES

The process of making semiconductor chips is both highly complex and very costly. Semiconductor fabrication plants, called fabs, house a large set of wafer-processing equipment which performs a series of process steps on round silicon wafers, which are typically 300mm in diameter. The equipment is operated in cleanrooms, which filter the air to avoid contamination from small particles that could negatively affect the circuitry on the chips. The dimensions of the features within each chip continue to get smaller, as the demand for performance continues to expand.

Our systems are designed for deposition processes when thin films, or layers, of various materials are grown or deposited onto the wafer. Many different thin-film layers are deposited to complete the full sequence of process steps necessary to manufacture a chip. After testing the individual circuits for correct performance, the chips on the wafer are separated and then packaged in a protective housing before ultimately becoming part of a set of semiconductor chips on circuit boards within an electronic product.



THE DRIVING FORCE

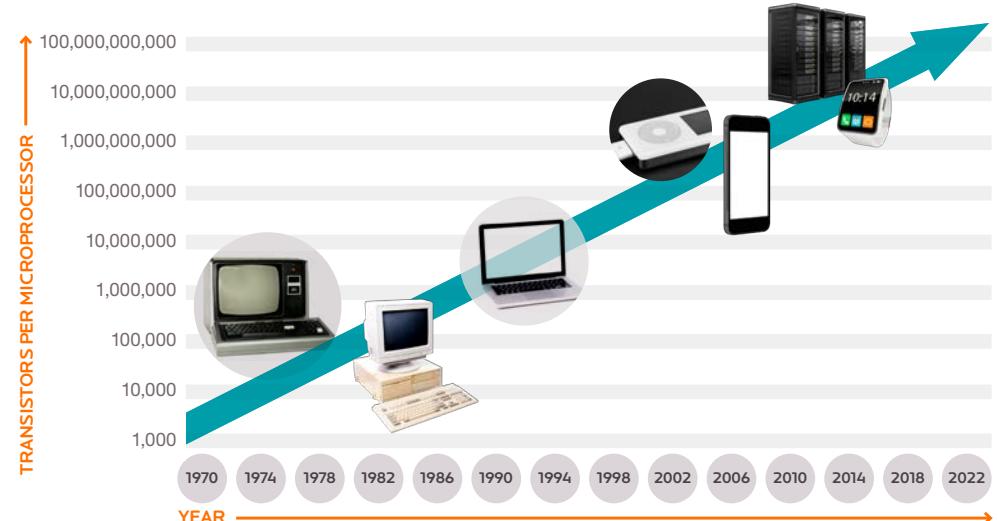
Our people are the driving force and the differentiating factor behind these innovations, which is why we focus on attracting and retaining talented individuals from across the globe. We know that it takes the right mix of people, working together, to solve big challenges. Investing in our people enables us to deliver the advanced nanotechnologies that lead to better products, resulting in an expansion in the connections, automation, and intelligence that drive our daily lives.

MOORE'S LAW

A key driver in the semiconductor industry is the continuous demand for smaller, faster, and cheaper semiconductor components. Through technology advances in the manufacturing process, semiconductor manufacturers are continuously scaling chips to smaller dimensions. This enables more transistors to fit in the same physical space, thereby reducing the costs and increasing the speed and performance of a device. Moore's Law states that the number of transistors in an integrated circuit will double approximately every two years, and the cost per transistor will reduce by half over the same time frame. The industry's relentless push to follow Moore's Law and the continuous demand for smaller, faster, and cheaper semiconductor components drives the technology advances in the semiconductor manufacturing process.

MOORE'S LAW

ASML's technologies are focused on helping enable our customers to continue extending Moore's Law.



THE WORLD IN WHICH WE OPERATE CONTINUED

ASMI is a global company with offices around the world. We are present in all major markets of our customers. For a complete list of all our locations, please visit our website.

THERMAL PRODUCTS BUSINESS UNIT AND PRODUCT RESEARCH & DEVELOPMENT

Almere, the Netherlands
Phoenix, AZ, US

RESEARCH FACILITIES

Helsinki, Finland
Leuven, Belgium

PLASMA PRODUCTS BUSINESS UNIT AND PRODUCT RESEARCH & DEVELOPMENT

Tokyo, Japan
Cheonan, South Korea

MANUFACTURING

Singapore, Singapore
Cheonan, South Korea

CHIP MAKING

Semiconductor chips are used in virtually all modern electronic products. From microprocessors, memories, and power devices, to image sensors, and analog devices, chips are critical to the global economy. Their use has revolutionized how we live, work, and play, enabling us to understand, create, and share information faster and more easily. Behind this lies the hugely complex manufacturing process that makes semiconductor chips a reality, and which gets increasingly complex every year.

SEMICONDUCTOR DEVICE MANUFACTURING

The process of manufacturing semiconductor devices on a wafer can be divided into three distinct parts:

- › Wafer manufacturing;
- › Transistor formation (known as Front-end of the line (FEOL) processing); and
- › Interconnect formation (known as Back-end of the line (BEOL) processing).

At ASMI, we develop, manufacture and sell equipment, and provide services used by semiconductor device manufacturers, at every stage.

WAFER PROCESSING

In the wafer manufacturing process, a large single crystal of very pure silicon is grown from molten silicon. The crystal is then sliced into a large number of thin slices, or wafers, of single crystalline silicon. These slices are polished to an atomic-level flatness before the next steps are executed. For advanced applications, some layers are deposited on the wafer for later use, by either epitaxy or diffusion/oxidation. Epitaxial wafers are even flatter and contain fewer surface defects than polished wafers.

FROM WAFER TO DEVICES

During FEOL and BEOL wafer processing, multiple thin films of either electrically-insulating material, also called dielectrics, or conductive material are modified, grown, or deposited on a silicon wafer. This involves the following steps:

- › First, several material processing cycles are used in the FEOL to build the basic transistor and other components such as capacitors and resistors; and
- › Second, several processing cycles are used in the BEOL to electrically connect the large number of transistors and components, and to build additional passive components such as capacitors, inductors, and resistors. Patterning of deposited layers with lithography and etching (described below) creates the transistors, passive components, and connecting wires, which together make up the integrated circuit. Each integrated circuit is a single chip or a die on the wafer.

A finished wafer may contain several dozen to several thousand individual dies. Wafer processing is performed either one wafer at a time in single-wafer processing systems or many wafers at a time in batch processing systems. Multiple deposition and patterning processes are performed on the same wafer to complete a device.

PROCESS STEPS

The number and precise order of the process steps varies depending upon the complexity and design of the integrated circuit. The performance of the circuit is determined in part by the various electrical characteristics of the materials used in the layers of the circuit and the wafer. Simple circuits may have as few as ten layers, while complex circuits may have more than one hundred layers. The device manufacturing process is capital-intensive, requiring multiple units of several different production systems. Many different but complementary methods are used to modify, grow, or deposit materials on the wafers. The device manufacturing process on the wafer is complete when all of the layers have been deposited and patterned on the wafer.

CLEANROOMS

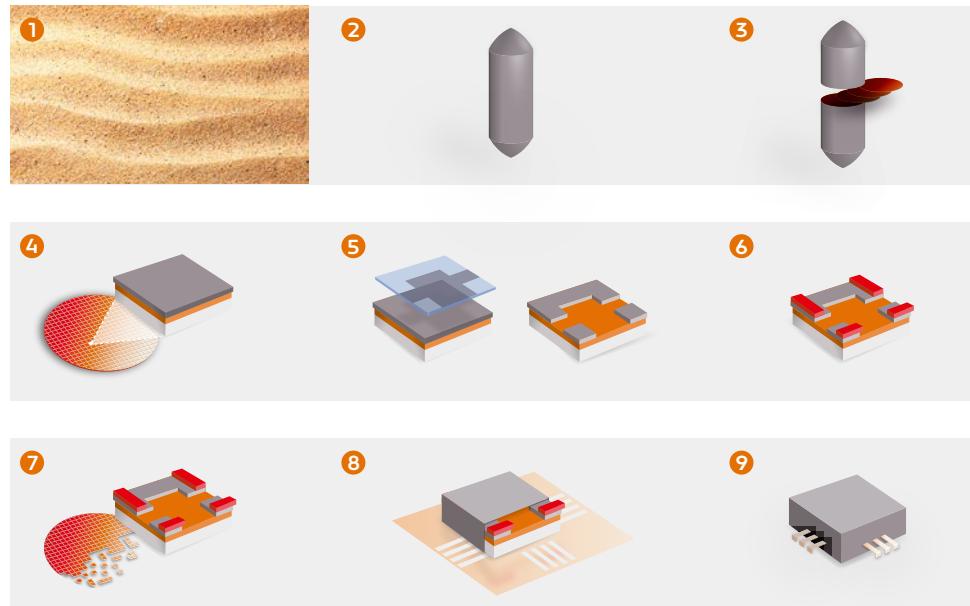
The introduction of even trace levels of foreign particles or material can make a circuit, or even an entire wafer, unusable. To reduce the level of foreign particles or material, wafer processing is performed in cleanrooms with ultra-low particle and contamination levels. The correct electrical functioning of the integrated circuits on each die is confirmed by probing. Non-functioning circuits are marked so they can later be discarded before money is spent on packaging the chip. The yield – or the percentage of known good die for a mature process – is usually well above 95%. For a process in development, the yield can be substantially smaller, and it is important to improve this as quickly as possible as it determines, to a large extent, the profitability of our customers.

FRONT-END AND BACK-END PROCESSING

There are two basic segments of chip manufacturing to complete a final packaged chip product. We refer to them as wafer processing, and assembly and packaging. We are an equipment supplier for the Front-end part: wafer processing.

During wafer processing – the start of the manufacturing line – manufacturers process wafers made of silicon, on which the electrical components are formed. During assembly and packaging – the Back-end of the manufacturing line – the wafers are divided up into individual chips and tested before being assembled and packaged.

CHIP MAKING PROCESS



1. FROM SAND TO PURE SILICON

It all starts with one simple, common substance: sand. The silicon found in sand is in the form of silicon dioxide. To make chips, manufacturers need pure silicon, which means the first step in the process is to separate the silicon from the oxygen molecules. The pure silicon needed to make silicon chips can have only one foreign atom for every billion silicon atoms. It must also be in monocrystalline form. The way atoms are organized in this form of silicon is essential to some of the later processes.

2. WAFER BLANKS

The silicon is then extracted, or pulled, from liquid silicon in the form of long cylindrical ingots at around 1,400 degrees Celsius.

3. WAFERS ARE CUT

Wafers are then cut from the ingots before being polished to produce a smooth surface. They are then sent to chip manufacturers for processing. The next steps in wafer processing are then repeated many times to create the finished wafer that contains chips.

4. COATING A WAFER

The wafer is put into a high-temperature furnace and exposed to oxygen, forming a layer of silicon dioxide on the surface. Then chemical vapor deposition (CVD) is used to add a layer or film of nitride.

5. CREATING MASKS

Once the circuit layout of the chips has been designed, glass plates or masks are created which help copy the design onto the surface of the wafer. Several masks are used in sequence to add more complexity to the chips.

6. ADDING A PATTERN

Now comes the time to begin creating the design on the surface of the wafer using the masks as a guide. Photolithography, a type of optical printing, is used. The wafer is first coated with photoresist, which changes when exposed to ultraviolet (UV) light. The mask is placed above the wafer and precisely aligned with it. UV light shining above the mask reacts with the exposed parts of the photoresist, creating a pattern. The wafer is covered with a developing solution to develop these patterns, which are then etched, leaving the parts not exposed to UV light intact. The surface now contains 'trenches' that run across the surface.

DEPOSITION

A dielectric or insulating film is deposited in the trenches by one of a number of deposition technologies such as CVD or ALD or PEALD. Gates are formed between the trenches, creating parts of the many millions of transistors that may be created on a single chip. Gates can be switched to allow charge carriers, such as electrons, to flow or to prevent them from flowing. Contacts are formed by each gate to create a source and drain. Ion implantation is used to implant special elements into the wafer for the source and drain. The charge carrier enters a gate channel at the source contact and exits at the drain contact.

CONNECT

Once the basic chip components have been created, they need to be connected. The same processes of lithography, etching, and deposition, are used to form trenches filled with metal connections. These connections between components are created not just on one level, but on many. The finished wafer will contain up to several thousand individual chips in a space of 200mm to 300mm, and some chips can hold billions of transistors.

7. WAFERS SEPARATED INTO INDIVIDUAL CHIPS

Once wafer processing has been completed, the finished wafers are transported to another plant for cutting, assembly, and packaging. The individual wafers are cut into separate chips.

8. LEAD FRAMES

The chips are then placed in a lead frame, forming a protective housing.

9. TESTING & PACKAGING

Each chip is then tested before being packaged to be sent for placement on circuit boards.



SHRINKING DIMENSIONS, EXPANDING PERSPECTIVES

ALMOST EVERY ELECTRONIC PRODUCT USES A SET OF SEMICONDUCTOR IC DEVICES. THE MOVE TO DIGITALIZATION IS DRIVING THE INCREASING AUTOMATION WE SEE EVERY DAY. AND, ULTIMATELY, THIS IS WHAT DRIVES THE INSATIABLE DEMAND FOR SMALLER, FASTER AND CHEAPER SEMICONDUCTOR CHIPS.

But how do high performance chips impact our everyday life? The impact is visible in many places. For example, electronic signs around our city can automatically redirect us to avoid traffic congestion, while collision avoidance systems can be integrated into our vehicles. Our perspectives are changing because of the expanding capabilities that are possible due to advanced computing.



CUSTOMERS



EMPLOYEES



INVESTORS



SOCIETY



VISIT ONLINE

ENABLING 3D DEVICES

HIGHER LEVEL

THE THIRD DIMENSION

For certain device types, the technology roadmap includes expanding in the third dimension: in a vertical 3D structure.

PROBLEM SOLVING

For logic devices, the performance scaling requirements have resulted in a 3D gate stack structure, commonly known as FinFETs. We are addressing technology challenges related to these structures through our ALD and epitaxy systems.

CUSTOMER SOLUTIONS

Using our equipment and process innovations, our customers can achieve their roadmaps for 3D devices. This enables them to deliver the next-generation chips demanded by the market for high-performance electronic systems.

CUSTOMERS

By working closely with our customers, we are intensely focused on developing innovative solutions to the roadmap challenges of realizing advanced technology nodes.

[VISIT ONLINE >](#)

ADVANCING MOORE'S LAW

SMALLER SIZE

NEW TECHNOLOGIES

Our customers rely on us to develop and deliver equipment and process solutions that help them achieve their technology roadmaps.

DIMENSION SCALING

Dimensional scaling is critical for high-performance computing and high-density data storage, the building blocks for today's expanding automation applications.

REAL OPPORTUNITIES

For our people, this means opportunities to work at the cutting-edge of their profession. Being involved in R&D activities that lead to ground-breaking developments means we are creating an environment that enables our people to excel and turn today's challenges into tomorrow's opportunities.

EMPLOYEES



00:01

Shrinking dimensions means developing new solutions within deposition processes, including film thickness control, patterning spacer sidewall performance, and particle management. This is achieved by our highly-skilled people, who produce cutting-edge technologies to address these challenges and advance Moore's Law.

VISIT ONLINE

EXPANDING OUR DEPOSITION APPLICATIONS

BROADER SCOPE

INVESTORS



Over the last few years, ASMI has further broadened its customer and product base. We have continued to focus on our innovative strength, building on our world-leading ALD performance and expanding our advanced epitaxy and PECVD capabilities.

DELIVERING SOLUTIONS

We are delivering compelling solutions for an increasing number of applications in the growing ALD sector.

NEW BUSINESS

In the epitaxy market, we introduced the new Intrepid ES tool, which enabled us to win new volume production business from a leading-edge foundry customer.

INVESTOR RETURNS

Our innovations are leading to a higher level of business for a broader range of deposition applications. This translates into long-term value creation growth and positive investor returns.

VISIT ONLINE

NEW TECHNOLOGY APPLICATIONS

BIGGER
IMPACT

SOCIETY



Developing new applications enables us to create technologies that, until recently, were seen as science fiction. Tomorrow's learning and health care will have as much to do with technology as ideas, creating a range of benefits for society.

TOMORROW'S TECHNOLOGY

We are focused on innovations and R&D that enable our customers to deliver the next-generation chips needed to implement the latest technologies.

INTERNET OF THINGS

Technologies that are connected by the IoT, with its huge potential to benefit society: from medical devices with embedded sensors to improve health care, to sensors on transport vehicles to monitor their location, speed and environment, all in real-time.

BENEFITTING SOCIETY

As smart devices and the IoT become ever-more integrated into our lives, artificial intelligence and more advanced data analysis will increase the applications, expanding the benefits to society.

VISIT ONLINE

STRATEGY & BUSINESS

CHAPTER PREVIEW

OUR STRATEGY

- › Mission, vision, strategy and focus areas
- › Long-term value creation
- › Corporate responsibility

OUR INNOVATION AT WORK

- › Collaboration and innovation at work
- › Markets and products
- › Research and development
- › People and society
- › Environment
- › Supply chain

RISK MANAGEMENT

- › Risk management approach
- › Risk categories and factors



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RISK MANAGEMENT

- › Risk management approach
- › Risk categories and factors

CHAPTER PREVIEW

Our technology enables precision deposition of thin films in various steps in the fabrication of semiconductor chips, helping our customers build the most advanced chips used in the electronics systems throughout society.

To advance our mission of providing our customers with the most advanced, cost-effective, and reliable products, service, and global support network in the semiconductor industry and beyond, in 2017 we continued to develop the three key elements of our strategy:

INNOVATIVE STRENGTH

Our innovative strength is what differentiates us in the marketplace, creates growth opportunities for our employees, and continues to be the cornerstone of our strategy.

LEADERSHIP IN DEPOSITION

We create value through our advanced thin film deposition technologies, which help leading semiconductor and technology industry partners to deliver the world of tomorrow through advanced chips. Our focus areas include high-k metal gate, advanced FinFET transistors, dielectric spacers for multiple patterning, and a number of other technologies.

OPERATIONAL EXCELLENCE

We aim to provide our customers with dependable, leading-edge products and services at a consistent quality level, providing the best cost of ownership. To help achieve this, we continue to optimize our manufacturing and global sourcing processes, including the migration to common product platforms.

MISSION, VISION, STRATEGY AND FOCUS AREAS

Our track record as an experienced innovation leader is the result of focusing on key issues and challenges within the semiconductor industry, enabling us to make a difference to our customers, employees, and company stakeholders. While challenges and opportunities may change over time, we will continue to transform the results of our breakthrough technologies into volume manufacturing, benefiting our customers.

MISSION

Our mission is to provide our customers with the most advanced, cost-effective, and reliable products, service, and global support network in the semiconductor industry and beyond. We advance the adoption of our deposition technology platforms by developing new materials and process applications that support our customers' long-term technology roadmaps.

VISION

We aim to delight our customers, employees, shareholders and society by driving innovation with new technologies, and delivering excellence with dependable products. By doing this, we will create new possibilities for everyone to learn, create, and share more of what they are passionate about.

STRATEGY

Our strategic objective is to realize profitable, sustainable growth by capitalizing on our innovative strength in deposition technologies and our strong relationships with key customers. We act thereby as a responsible citizen.



INNOVATIVE
STRENGTH



LEADERSHIP
IN DEPOSITION



OPERATIONAL
EXCELLENCE

We are committed to making positive contributions to society and striving to prevent harm to people and reduce our impact on the environment. This is the foundation of our commitment to improve the communities and industry we operate in. We are a part of a fast-paced industry that continues to reshape the world. Our technology enables the semiconductor industry to drive innovation in communications, energy, transport, medicine and beyond.

We are making positive contributions in what we do. We have a certified global environmental management system to drive continuous improvement in environmental performance across all of our operations. We are committed to the Responsible Business Alliance (RBA) Code of Conduct and will strive to meet its goals as best we can on a global basis. We are engaging our supply chain to do the same. We continue to focus on and enable the achievement of smaller device geometries which will enable even greater advances and opportunities in communications, energy, medicine and the positive advances of humanity.

At ASMI we know that meeting the needs of today does not mean compromising the future. Therefore we encourage our employees to make positive contributions to our customers and suppliers, our industry, environment, and society reflecting our ambition to drive innovation and deliver excellence.

THE KEY ELEMENTS OF OUR STRATEGY ARE:



INNOVATIVE STRENGTH

We are recognized for our technology leadership. We provide leading thin film deposition technologies that support our customers in staying on the curve of Moore's Law. Our innovative strength is what differentiates us in the marketplace, creates growth opportunities for our employees, and continues to be the cornerstone of our strategy. Apart from our internal R&D efforts, we are continuously expanding and deepening our strategic cooperation with key customers, suppliers, chemical manufacturers, and research institutes such as imec. Our suppliers manufacture advanced components and assemblies to the tightest of tolerances and are required to adhere to our stringent design specifications, quality systems, and corporate responsibility requirements. This approach enables us to remain innovative and swiftly meet the changing demands of our customers.



LEADERSHIP IN DEPOSITION

We create value through our advanced thin film deposition technologies, which help leading semiconductor and technology industry partners to deliver the world of tomorrow through advanced chips. One of these technologies is ALD, which is established as a mainstream technology in high-volume manufacturing, supporting virtually all of the leading customers in the semiconductor industry. As a leader in this space, ALD has turned into a key growth driver for our business. We expect that the trends of continued scaling and evolution towards 3D device structures will further expand the number of applications for ALD. We aim to maintain our leading position in ALD by leveraging on our strong expertise and established customer relationships, and by developing new applications in deposition technologies to support our customers with increasingly complex device node transitions. We are also expanding the applications that we address in epitaxy, by focusing on advanced-node applications in logic/foundry and memory.



OPERATIONAL EXCELLENCE

While technology leadership remains crucial, we have a responsibility to our stakeholders to continue to focus on further improving the effectiveness of our organization and process efficiency. We aim to provide our customers with dependable, leading-edge products and services at a consistent quality level, providing the best cost of ownership. To help achieve this, we continue to optimize our manufacturing and global sourcing processes, including the migration to common product platforms. We are working with our suppliers to improve fundamental quality through statistical methods and process controls. Our employees are engaged in an improved product life cycle process and our Product Safety Council is focused on further improving product safety through fundamental design.

In addition to addressing the technology needs of our customers, we also focus on further increasing equipment throughput and equipment reliability, thereby lowering the cost per wafer of our wafer processing systems. Combined with our commitment to quality, we continuously strive to achieve industry-leading productivity. In addition, to enable further efficiencies in our manufacturing process and the maintenance process of our customers, we put significant efforts into improving the level of standardization in our equipment portfolio by migrating to common platforms, subassemblies and components.

FOCUS AREAS

Within wafer processing, we focus primarily on equipment and process solutions for the deposition of thin films. Our core strengths are in ALD, epitaxy, Plasma Enhanced Chemical Vapor Deposition (PECVD), low pressure chemical vapor deposition (LPCVD) and oxidation/diffusion. With this broad portfolio of technologies, we are addressing many of the key areas on the semiconductor industry roadmap, including:

- › high-k metal gate;
- › advanced FinFET transistors;
- › dielectric spacers for multiple patterning;
- › advanced 3D memories;
- › liners, etch stops, and spacers;
- › low-k dielectrics for interconnect;
- › strained silicon for transistor channel engineering; and
- › surface pre-clean for interface control.

Our breakthrough technologies enable the industry to move to smaller line widths and better transistors that use new materials. We focus on serving the top companies that produce logic chips and memory devices, which includes addressing the needs of leading foundries. By serving the leading chipmakers, we maintain an understanding of the important requirements of the next generation of device roadmaps, enabling us to develop value-added solutions to the industry's critical issues. In many cases, new films developed for one device type can be utilized for other device types with relatively limited additional development.

CUSTOMER FEEDBACK

In February 2017, we received a Supplier Excellence Award from TSMC for the performance and support of our ALD equipment and technology during 2016. During the presentation of the award, TSMC explained the three key points that contributed to the award:

- 1 cutting-edge tool innovations for advanced nodes;
- 2 superb support to achieve quick solutions on consigned tools; and
- 3 great record of on-time tool delivery.

Furthermore, TSMC also recognized ASMI with another Excellent Performance Award at their 2017 Supply Chain Management Forum in December.

In March 2018, ASMI has been recognized by Intel as a recipient of a 2017 Preferred Quality Supplier (PQS) award. The PQS award recognizes companies like ASMI that Intel believes have relentlessly pursued excellence and conducted business with resolute professionalism.

LONG-TERM VALUE CREATION

We create value through our technologies by enabling leading semiconductor and technology industry partners to deliver the world of tomorrow through our innovative processing solutions and equipment. We partner with our customers and stakeholders to develop new materials, processes, and technologies that support their technology roadmaps that shape the world of the Internet of Things, smart cars, artificial intelligence, and cloud computing.

In the chip-making process, we are now creating transistors that are only a small number of nanometers in width. Connecting billions of nanoscopic transistors on a single chip requires an astonishing degree of precision and control. As a leading supplier of equipment and process solutions to the semiconductor industry, our technology makes this possible.

GREATER PERFORMANCE, REDUCED ENERGY CONSUMPTION

Our advanced deposition technologies support cost-effective products enabling the electronic devices of the future. This leads to electronic devices that deliver ever-greater performance while reducing their energy consumption. Higher performance translates into more processing power, while a lower energy requirements means smaller, longer-lasting, more efficient products. This enables our customers to further integrate smart technology into a wider range of their products.

The result is value creation not only for our customers, but for all of our stakeholders. For example, our employees enjoy the challenge of developing cutting-edge technology solutions, and have the opportunity for advancement. Our suppliers, in addition to a higher activity level, also benefit from improved quality based on the use of statistical methods employed in our supplier process control program.

10 NANOMETER DEVICES

The industry's relentless push to follow Moore's Law leads to the continuous demand for smaller, faster, and cheaper semiconductor components. Thus, the minimum size of a single transistor in an integrated circuit is an important parameter. As the transistors in an integrated circuit become smaller, the cost-per-component decreases. At the same time, the operating speed of the transistor increases.

Today, our customers manufacture semiconductor devices as small as 10 nanometers (one nanometer, or nm, is one billionth of a meter), sometimes in a vertical 3D transistor or FinFET

architecture. Our customers are already qualifying and testing new critical processes to generate devices with line widths at or below 7nm. Simultaneously, in our customers' laboratories and several collaborative research environments, advanced 5nm design rule devices and related materials are being developed. These next-generation technology nodes are increasing the demand for new materials and more complex process integration methods.

In developing faster and smaller devices, our customers' major technology requirements are:

- › introduction of new thin-film materials and device designs needed for continued scaling;
- › reliable manufacturing of taller and narrower 3D structures in devices;
- › lithography of ever-smaller feature sizes, now much smaller than the wavelength of visible light; and
- › new manufacturing processes that reduce device variability and increase yield.

DEVELOPING NEW MATERIALS

In order to meet our customers' needs, we are developing many new materials. For example, ALD technology is used to create ultra-thin films of exceptional quality and flatness. ALD of high-k dielectrics and novel metal gate electrodes can improve the performance and reduce the power consumption of a device, thereby enhancing battery life. This same class of materials can also lead to larger charge storage in a smaller capacitor, critical for memories and RF circuits.

In addition to the development of the high-k dielectric, there is also a great deal of focus on new technologies and materials for the metal gate electrode, the gate sidewall passivation, and many other applications. Plasma Enhanced ALD (PEALD) is an important technology that enables precise deposition at very low temperatures. One application of PEALD is spacer defined multi-patterning, whereby the deposition of a highly conformal oxide spacer enables the extension of existing optical lithography technology beyond its basic resolution limits. Another example of new materials is from epitaxy deposition.

EPITAXY

Epitaxy is a process for depositing highly controlled silicon-based crystalline films. Many epitaxy steps are used to create the transistor channel and for channel engineering to improve transistor performance. Our silicon-germanium (SiGe) and silicon-carbon-phosphorous (SiCP) epitaxial materials can increase the switching speed of the transistors and the circuit in which they are embedded by so-called strain engineering. Strained silicon is a layer in which the atoms are stretched beyond their normal interatomic distance, allowing higher electron mobility. This results in faster transistor switching at lower power. In 2017, we introduced a new epitaxy tool, the Intrepid ES, for advanced-node CMOS logic and memory applications, which offers an innovative closed-loop reactor temperature control system enabling precise process control, high productivity, and low cost per wafer.

LOW-K MATERIAL SUITE

For interconnect processes, a continued demand to improve the speed at which signals travel through thin copper wires has led to the development of a full suite of low-k materials. These low-k materials can decrease the amount of delay in signal propagation, resulting in, for example, faster microprocessors. Simultaneously, these low-k materials can reduce the amount of power loss in the interconnections. We have been one of the leaders in successfully introducing these low-k materials in the market, and we are continuing to develop improvements to this low-k technology to enable faster interconnect circuits.

HIGH PRODUCTIVITY

In addition to addressing the technology needs of our customers, the relentless drive of the industry to reduce cost corresponds to significant spending on development programs that further increase throughput, equipment reliability, and yield in our customers' line, and further lower the cost per wafer of the wafer processing systems.

An excellent example of high productivity is our XP8 platform, on which we offer PEALD and PECVD processes. The XP8 incorporates eight process chambers in a compact configuration around one central handling platform. Two wafers are moved simultaneously into dual chamber modules (DCM), which generally doubles the throughput compared to single wafer movements. Eagle XP8 PEALD tools and Dragon XP8 PECVD tools are in volume manufacturing at logic and memory fabs worldwide, and demonstrate reliable advanced performance with high productivity.

ALD AT ASMI

ALD is one of the newest technologies to deposit ultra-thin films of exceptional flatness and uniformity. This technology was brought into ASMI in 1999 with the acquisition of Microchemistry, who first developed thermal ALD technology. Plasma Enhanced ALD (PEALD) is an extension of this original ALD technology that uses plasma, which was brought into ASMI in 2001 through a partnership with Genitech, and a subsequent acquisition in 2004 and formation of ASM Korea.

The use of plasma enables us to deposit high-quality films at very low temperatures. ALD is a very versatile technology that can be used to deposit high-k insulating materials, conductors, silicon oxide, silicon nitride, and other materials. We expect the trends of continued scaling, and evolution towards 3D device structures for both logic and memory devices, to play into the strength of our ALD position. We offer ALD/PEALD processes on several of our product platforms, including single-wafer and batch systems, and for multiple wafer sizes.



OUR BUSINESS MODEL

Our technology enables precision deposition of thin films in various steps in the fabrication of semiconductor chips, helping our customers build the most advanced chips used in the electronics systems throughout society.

Our business model enables us to create value for the company and all of our stakeholders. We achieve this by working with our customers to develop innovative solutions, while constantly looking at what is best for our investors, our employees, society, and other stakeholders. Fundamental to our model is R&D investment, including basic chemical, materials, and feasibility research, followed by process and product developments. We endeavor to continuously employ experts in the semiconductor process and equipment technology fields. We cooperate with research institutes and our customers to understand the technology roadmap challenges and to develop the appropriate process and equipment solutions required. Our manufacturing facilities allow us to deliver high-quality systems on schedule so that our customers can ramp their fabrication plants. We support our customers globally with process and equipment service, and spare parts.

HOW WE CREATE VALUE



CORPORATE RESPONSIBILITY

Since 1968 we have helped the industry to create smaller, cheaper, and more powerful microchips. Our focus is on continuing to help our customers achieve their technology roadmap, by expanding our broad portfolio of innovative technologies and products.

Our innovations have led to a range of scientific breakthroughs, which have positively benefited many aspects of society. We have pioneered technologies that are widely used today, including photolithography, epitaxy, ion implantation, and atomic layer deposition (ALD). These innovations support our customers' roadmaps to bring the end consumer the technologies of today and tomorrow.

Our investment in research and development (R&D) is key to our mission. We have R&D partnerships with customers, universities, industry groups, and with our suppliers. We believe these partnerships help us positively influence many segments of society around the world. This is a responsibility we incorporate into our CR strategy.

The key elements of ASMI's strategy, being Innovative Strength, Leadership in Deposition, and Operational Excellence, are reflected in our corporate responsibility (CR) strategy:

- › strengthen our R&D and innovation to create value for society;
- › support innovation by managing all aspects of our business responsibly to meet or exceed stakeholder expectations; and
- › recognize that managing all aspects of our business includes holding our critical suppliers to the same standards we hold ourselves to.

The United Nations' Sustainable Development Goals (SDGs) reflect the priorities of global society, and our CR strategy makes significant contributions to a number of these important goals.



The ways we contribute to these SDGs are described below in the detailed descriptions of our three strategic CR pillars.

PILLAR 1 – STRENGTHEN R&D AND INNOVATION

For decades, we have contributed technological innovations that help drive modern society. To continue to innovate and benefit society, we need to focus strongly on our R&D efforts, and improve the way we bring our product to market through our product life cycle process. Of course, these societal benefits can only be realized when innovations are brought to market. An efficient and effective product life cycle process is therefore important to bring continually improved technological capabilities to all aspects of life.

Our investments in R&D and our breakthroughs in bringing technological advances to the marketplace enable us to make substantial contributions to several aspects of SDG 9: Industry, Innovation and Infrastructure.



ASMI MISSION

Our mission is to provide our customers with the most advanced, cost-effective, and reliable products, services and global support network in the semiconductor industry, and beyond.



CR VISION

As a truly global citizen, our vision of **ZERO HARM!** means we strive to reduce our impact on the environment, and positively contribute to society.



CR STRATEGY

- › Continue our strong focus on R&D and innovation to create value for society through technology.
- › Manage all aspects of our business responsibly to meet or exceed stakeholder expectations.
- › Hold our critical suppliers to the same standards that we hold ourselves to.

PILLAR 2 – MANAGE ALL ASPECTS OF BUSINESS RESPONSIBLY

We believe that responsibly managing our business creates value for our company, as well as our stakeholders and society. Our key corporate responsibility philosophy is ZERO HARM! We strive to prevent harm to people, reduce our impact on the environment, and make positive contributions to society. To achieve these goals, we strive to be innovative and challenge conventional approaches, using our guiding principle 'Drive Innovation, Deliver Excellence'.

Our CR policy lays out our commitment and expectations to health and safety, the environment, labor, ethics, and supply chain management. Each of these areas is further supported by policies, systems, programs, and metrics to ensure that we meet our long-term objectives. The full text of our CR policy is available on our website.

Through stakeholder alignment, we have based our CR Strategy on the Responsible Business Alliance Code of Conduct (RBA, formerly the Electronics Industry Citizenship Coalition, EICC) framework.

The RBA Code of Conduct (the Code) has been widely adopted throughout the electronics industry, with the semiconductor industry and its value chain an essential aspect of this. Many of our customers are RBA members, and as a critical supplier to them we are expected to adopt the Code. The Code, evolves constantly to cover the most recent developments in responsible business practices, and is updated regularly to stay abreast of societal norms and expectations, and the evolution of international standards and expectations. We are committed to upgrading our management practices as the Code and other standards and expectations evolve. Currently, the Code references and follows multiple international expectations and standards, including:

- › the OECD Guidelines for Multinational Enterprises;
- › the Universal Declaration of Human Rights; and
- › the ILO International Labor Standards and International Organization for Standardization (ISO).

Differences between the Code and the OECD Guidelines are mainly related to business-to-consumer aspects which are not relevant to our business. We use the Code, its supporting documentation, and engagement with RBA member customers to drive a continuous improvement process within the company. The framework of the Code allows us to critically assess our compliance with it and customer expectations. We routinely assess our standing with the Code via multiple methods, including self-assessments, internal audits, and customer audits.

However, responsibility is more than codes and standards, it is also about understanding stakeholder priorities, our material aspects, and integrating responsible business practices into our strategies, objectives, and processes. In this way, we are routinely reassessing ourselves, engaging with

key stakeholders, and finding ways to reduce harm, and bring value to society. Employees are encouraged to contribute to this at ASMI, helping strengthen our ZERO HARM! vision.

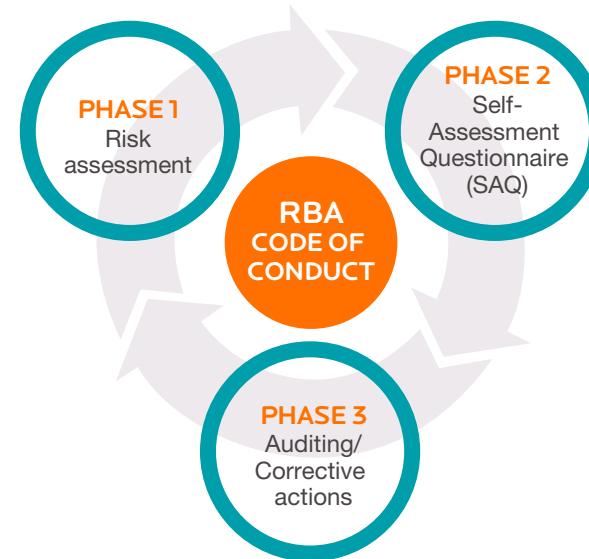
Through our efforts to manage all aspects of our business responsibly, we contribute to global progress towards the SDGs for gender equality, decent work and economic growth, responsible production, and climate action (SDGs 5, 8, 12 and 13).

PILLAR 3 – HOLD CRITICAL SUPPLIERS TO THE SAME STANDARDS

Our supply chain is the full system of building and delivering our products to customers. We know we lead a larger system to deliver our final product, and we drive responsibility within that system.

Our approach is driven by our Supplier Code of Conduct (CoC). We have taken into account our stakeholder requirements for a supply chain compliant with the RBA Code of Conduct, and have adopted the Code directly as our Supplier CoC. This ensures our critical suppliers are aligned with the policies and expectations of ASMI. We require our direct suppliers to acknowledge the CoC. If non-compliance is identified, we may choose to terminate the supplier relationship.

CRITICAL SUPPLIER CR STRATEGY



We operate an assurance process for our critical suppliers, who are identified annually based on key elements such as, but not limited to, the amount we spend with them, how many similar or alternative

suppliers exist, and the amount of time we would need to switch suppliers if we had to. We set objectives for Code acknowledgment, self-assessment, and auditing/corrective action processes that are consistent with RBA requirements.

Our customers also view the ASMI supply chain as their own. Their value chain includes our value chain, and their feedback in 2017 places emphasis on preventing forced and bonded labor (FLBL) and increased attention on diversity.

By focusing on responsible business practices in our supply chain, we expand our impact and our contribution to the achievement of relevant SDGs.

CR STRATEGY AND GOVERNANCE

Our CR management system relies on the Corporate Governance Framework set out in the Governance section of this report. This begins with the Supervisory Board and Management Board and the corporate governance standards and values they hold the company accountable to.

Our Management Board is actively engaged in corporate responsibility through the Corporate Vice President of Human Resources, who is also Chairperson of the ASMI Ethics Committee, and the Corporate Vice President of Operational Excellence, who is directly responsible for the Environmental, Health, Safety, and Corporate Responsibility of the company.

Working together, these two organizations define the strategy and approach to corporate responsibility in terms of environmental performance, employee health and safety, labor and ethics, which is subject to approval of the Management Board. The implementation and control of economic and financial aspects is overseen by the Management Board. The Management Board is supported by various functions that each regularly provide forward looking information for the company and the business it operates in.

CORPORATE GOVERNANCE FRAMEWORK



COMMITTEES

ETHICS COMMITTEE

Our Ethics Committee governs our system of ethics, and reports to the Management Board. The committee is chaired by the Corporate VP of Human Resources, and is composed of representation from the departments legal, corporate responsibility, internal audit, and regional human resources. This committee monitors global ethics issues facing our industry and society, receives feedback from stakeholders, and closely monitors issues we face to set and improve our ethics management system. The committee also monitors performance to the system, meeting regularly and reporting progress to the Management Board. The Ethics Committee also has the important role of supervising the investigation of all ethics-related complaints, including those anonymously reported via SpeakUp!. The SpeakUp! process enables employees, suppliers, customers and any other stakeholder to report ethics issues, concerns or complaints, anonymously and in their own language.

RESPONSIBLE BUSINESS ALLIANCE COMMITTEE

The RBA Committee is chaired by the Director Global Corporate Responsibility and is comprised of subject matter experts and executives. The RBA Committee governs the RBA framework and performance, and reviews applicable stakeholder feedback to the committee's oversight of material issues, meeting regularly throughout the year. The committee sets performance objectives and reports to the Management Board.

STAKEHOLDER ENGAGEMENT

Integration and alignment with the world around us makes us stronger. We learn, grow, and evolve to be a better company with feedback and input from stakeholders. Their feedback can help us shape strategy, policy making, and objectives in relevant areas of social responsibility. Stakeholder feedback also helps to ensure that our decisions and innovations lead to meaningful benefits for all key stakeholders.

KEY OUTCOMES OF ENGAGEMENTS IN 2017

STAKEHOLDER	ENGAGEMENT METHOD	FEEDBACK	OUTCOME
Customers	Direct customer meetings (recurring) Attending customer supplier development sessions (recurring)	Engagement with our key customers has provided systematic inputs for our annual program to improve the structural maturity and operational performance of the company	ASMI continues to score higher on supplier process maturity scales with key customers, and strengthens its related policies, procedures, and activities
Employees	Bi-annual survey	Survey conducted of all worldwide lab employees, with feedback on areas to improve safety and satisfaction in the labs	Focused lab safety improvement plan with targets tied directly to the employee feedback, including improvements in communication of lab safety project improvements, and improvements in routine manager and employee participation audits
Industry consortium and partners	Renewed R&D partnership with imec Extended University of Helsinki partnership	Cooperation and bilateral research activities	Additional ALD, PEALD, Epitaxy, and LPCVD capability

These key outcomes are just a few examples of how we consider stakeholder input and feedback, which we use to further improve our strategies, targets and ultimately our performance.

Additionally, in 2017 we continued to participate in the Transparency Benchmark, an annual assessment on the content and quality of corporate social responsibility reports of Dutch companies.

A key step in engagement is first identifying key stakeholders, including:

- › customers;
- › employees;
- › suppliers;
- › shareholders and investors;
- › society, including but not limited to:
 - › governments and regulators;
 - › non-governmental organizations (NGOs);
 - › industry consortiums and partners;
 - › local communities in which we operate.

The benchmark helps us gain insight on not only improved reporting, but also on strengthening our programs. Our 2017 performance in the benchmark improved 23% over the 2016 scoring. This benchmark is viewed as an important tool to various stakeholders, including the Dutch Ministry of Economic Affairs as the administrators of the benchmark, and others who have expressed interest as the VDBO and SRI focused investors.

MATERIALITY

In 2015, we introduced our materiality assessment process. The process provides us with the opportunity to continually assess if our strategic objectives, actions, and initiatives are aligned with our stakeholders and overall importance to our business. The process has remained constant since then, following the sustainability materiality steps and matrix based on the Global Reporting Initiative's (GRI) G4 Sustainability Reporting Framework, and represents the internal and external stakeholders we have identified. We have also identified environmental, social, and economic aspects that have the greatest impact on our business and have generated the greatest level of interest with our stakeholders across our value chain. The assessment encompasses aspects that are internal and external to the organization.

The materiality assessment continues to capture more aspects of our business, and in the three cycles it has been conducted there has been a slight shift, in importance levels. The risk ranking of the relevant aspects provides a list of our primary strategic focus areas.

For example, while 'company financial health', 'innovation and R&D investment', and 'product safety and compliance' are still the highest-ranking aspects, there has been a gradual increase in importance of 'information security'. In response, we continue to assess our information security positions, and improve on protection strategies.



ECONOMIC

- 1 Company financial health
- 2 Innovation and R&D investment
- 3 Protecting and using intellectual property
- 4 Business risk and business continuity (BCP)
- 5 Product life cycle management

SOCIAL

- 6 Worker health and safety
- 7 Information security
- 8 Attracting, developing and retaining talent
- 9 Ethics and code conformance
- 10 Training and education
- 11 Employee relations and workplace vitality
- 12 Stakeholder engagement and communication

ENVIRONMENTAL

- 13 Trusted partner for customers via code conformance
- 14 Supply Chain EHS
- 15 Human rights/conflict minerals
- 16 Supplier Labor Standards
- 17 Diversity
- 18 Community engagement
- 19 Product safety and environmental compliance
- 20 Hazardous substance management
- 21 Energy use/greenhouse gas (GHG) reduction
- 22 Water usage/recycling
- 23 Recycling/reuse

All aspects shown in the materiality matrix results are material. Decisions on how to prioritize resources are made regularly, with priority given to those in the high Impact and Importance category. These are considered the primary aspects.

Each one of the current primary aspects is considered strategic to the business, and is integrated with strategic initiatives where applicable. One example is the investments made in R&D, which result in patents and intellectual property that are part of the assets protected by our information security systems. Protecting these investments helps drive company financial health through product development and customer confidence.

Those near the bottom of the assessment are not considered immaterial. In many cases, we do evaluate those against future risks and global trends. One example is the environmental performance aspects. We recognize that climate change, resource conservation, and water management are critical to the survival of the planet. Our impact may be small compared to other companies, but the collective contribution of everyone can have an impact on future generations. We know we can do our part, and strive for improvements in the way we manage our environmental impact. One example of this is the implementation of a water reuse system at our Phoenix facility.

Our validation process is managed through the internal committees and business function owners. Those organizations use applicable market research, benchmarking, and performance assessments to identify gaps and opportunities, as well as risks and challenges to set future strategies, steering methods, and controls.

PRIMARY ASPECTS	OUR STRATEGIES	SETTING STRATEGIES, STEERING AND CONTROLS	NEW IN 2017	RESULT/STAKEHOLDERS' IMPACT
ECONOMIC				
1 Company financial health 2 Innovation and R&D investment 3 Protecting and using intellectual property	<ul style="list-style-type: none"> › Realize profitable, sustainable growth through innovation › Maintain technology leadership in deposition › Invest in and develop new applications to support our customers' with increasing technology requirements › Leverage our strong technology expertise to enhance customer/stakeholder relationships › Create the company culture and environment for innovation and patent creation with strong IP protection programs 	<ul style="list-style-type: none"> › Management meetings › Market assessments › Business unit/operational reviews › Technical steering meetings › Legal reviews 	<ul style="list-style-type: none"> › Renewed R&D partnerships with imec and University of Helsinki › Continued implementation of software, training and agreements protecting IP 	<ul style="list-style-type: none"> › Technology leadership recognition with sustainable profitability and business growth › IP creation/Patent creation
SOCIAL				
6 Worker health and safety 7 Information security 8 Attracting, developing and retaining talent 9 Ethics and code conformance	<ul style="list-style-type: none"> › We use performance evaluation, succession planning, and employee learning and development programs › Establish leadership academy to ensure our leadership pipeline and stay competitive in labor markets › We partner closely with select top universities globally for technology development and recruitment › Conducts business according to ethical and professional standards › Implement Ethics Code of Conduct, CR policy and commitment to our RBA Code of Conduct › Secure IT systems 	<ul style="list-style-type: none"> › Global Human Resources › Global EHS › Global IT › Ethics Committee 	<ul style="list-style-type: none"> › Globally harmonized new employee onboarding process › Interactive platform for developing managerial skills › Piloting technical career ladder for engineers › Lab gas system improvements › Customer safety leadership engagements › Management safety audit leadership › Gifts and entertainment policy and reporting improvements › Enhanced employee IT security awareness › IT Infrastructure modernization 	<ul style="list-style-type: none"> › Stable workforce with suitable technology and leadership capability › Employees' professional development › Employment creation and employee satisfaction › Safer work environment and processes › Closer engagement with customers for shared work environments › Compliance and responsible business practices › Secure innovation and personnel data
ENVIRONMENTAL				
10 Product safety and environmental compliance 20 Hazardous substance management	<ul style="list-style-type: none"> › Reduce overall risk of exposure with focus on high risk activities and functions, including Labs, Manufacturing and Service › Contribute to the communities in which we operate, and continuously strive to reduce the environmental impact 	<ul style="list-style-type: none"> › Product safety steering committee › Business unit engineering › Global EHS and facilities 	<ul style="list-style-type: none"> › Strengthen product compliance team › Improved standardization of global design standards › Lab gas system enhancements › Improvements in chemical storage infrastructure 	<ul style="list-style-type: none"> › Compliant and safe products › Customer satisfaction and safety › Minimize environmental impact and protect communities in which we operate

The table above provides an overview of the primary aspects and their related strategies.

For full discussion on each aspect, please refer to the following:

PRIMARY ASPECT	MORE INFORMATION IN
1 Company financial health	Financial statements
2 Innovation and R&D Investment	Research and development
7 Information security	Research and development
19 Product safety and environmental compliance	Markets and products
8 Attracting, developing and retaining talent	People and society
3 Protecting and using intellectual property	Research and development
9 Ethics and code conformance	People and society
6 Worker health and safety	People and society
20 Hazardous substance management	Environment

TAX PRINCIPLE

Taxes are determined and paid in accordance with all relevant rules and regulations in the countries in which we operate. We do not use artificial tax structures solely aimed at tax avoidance. We aim to follow both the letter as well as the spirit of the law.

We apply the arm's length principle to determine transfer prices in accordance with domestic and international rules and standards, such as the OECD Guidelines for Multinational Enterprises. Our disclosures are made in accordance with the relevant local and/or international regulations.

Our goal is to seek an open and constructive dialog with the tax authorities in the countries where we operate, and we aim to disclose all relevant facts and circumstances. We believe that this will enhance certainty on our respective tax position in view of the applicable tax rules and regulations.



COLLABORATION AND INNOVATION AT WORK

Collaboration and innovation are key to our success. While our core technologies, products, and services enable our customers to develop their technology roadmap, our capabilities hinge on the partnerships we enjoy with all our stakeholders. Partnerships that include our key customers, suppliers, research institutes, universities, society and, of course, our people. Without our people, we would not be the company we are today. Below we have outlined those areas where collaboration and innovation are vital to our continued success.

MARKETS AND PRODUCTS

As an innovation leader for nearly a half-century, the greatest contribution we make to society is through our advanced technology developments, including Atomic Layer Deposition (ALD), plasma deposition, and epitaxy. The result? A broad range of products, services, and innovative solutions that support our customers to make the products that connect the world.

RESEARCH AND DEVELOPMENT

Our research and development (R&D) teams develop the new materials and processes that lead to the technological breakthroughs that drive us forward. But achieving these breakthroughs involves working closely with our research partners and customers. As part of our efforts to increase innovation, we continue to pursue and enhance strategic R&D partnerships with universities, industry groups, and customers.

BREAKTHROUGH TECHNOLOGIES

Our long track record of scientific breakthroughs helps to create transistors only a few times larger than a single strand of DNA. Working alongside our customers, we have co-created technology roadmaps that have led to a range of advanced technologies, including the home computer, smartphones, medical equipment, and nearly every device containing an integrated circuit. Today, the strong relationships that enable us to develop our technologies help support the astonishing leaps behind the Internet of Things, cloud computing, artificial intelligence, and smart cars.

PEOPLE AND SOCIETY

The world we live in is made up of a series of connections: people connecting to people; people connecting to machines; and machines connecting to machines. At ASMI, we know that it takes the right mix of people, working together, to solve big challenges. This is why we attract and invest in talented people from around the world. By investing in their future, we believe we are investing in all our futures.

ENVIRONMENT

Our technologies contribute positively to the world around us through improved computing power and reduced energy consumption. We recognize, however, that this is not enough, and are striving to reduce the environmental footprint of our direct operations. We align our strategies across the industry, including with customers and industry standards, to focus on key areas such as reducing greenhouse gases and water consumption, improving our recycling and reuse of raw materials, and focusing on responsibly designed and operated facilities.

SUPPLY CHAIN

As our technologies develop and expand, our partnerships for success also must grow to meet the increasing demands of our customers. A strong supply chain is critical to our success. We have set forth a framework for technological strength at a competitive cost, as well as resiliency and responsibility in our operations and supply chain.



MARKETS AND PRODUCTS

The semiconductor capital equipment market is composed of three major market segments: wafer processing equipment, assembly and packaging equipment, and test equipment. We operate in the semiconductor wafer processing equipment market, primarily for deposition equipment.

MARKETS

In 2017, the semiconductor industry was driven by a US\$2 trillion global electronics industry (VLSI Research Chip Insider, January 23, 2018) that required approximately US\$350 billion of semiconductors, which was up by around 20% compared to 2016, driven mostly by higher prices in memory devices. In turn, the semiconductor industry supported the approximately US\$71 billion semiconductor capital equipment industry (up around 30% compared to 2016), which supplies the required production systems and services. The equipment segment was driven mostly by capacity expansion in 3D-NAND memory fabs, technology conversion investments in DRAM memory fabs, and new technology generation investments in logic and foundry fabs.

We serve the wafer processing equipment segment, which is part of the capital equipment segment. This, in 2017, was worth approximately US\$47 billion. Demand for semiconductor capital equipment is driven both by growth in the market for semiconductor devices and the new technology needed to realize the next generation of devices.

LOGIC, FOUNDRY AND MEMORY MARKETS

- › ASMI supplies equipment to the leading semiconductor manufacturers in the logic, foundry, and memory markets, primarily for the deposition of thin films;
- › The logic market is made up of manufacturers who create chips that are used to process data. Known as the central processing unit (CPU), this microprocessor is the ‘brains’ of a computer system, and can be found in smartphones, laptops, and computers;
- › The foundry market consists of businesses that operate semiconductor fabrication plants to manufacture the designs of other so-called fabless semiconductor companies; and
- › The memory market covers manufacturers who make chips that store information either temporarily, such as Random Access Memory (RAM), or permanently, such as NAND non-volatile memory. The NAND memory market has evolved to include 3D-NAND chips, which are designed for the vertical stacking of memory cells to increase bit density.

ANALOG DEVICE MARKETS

We also supply equipment to leading manufacturers of analog semiconductor devices, which are important for enabling the increasing semiconductor content used in most products worldwide.

The analog market includes a wide array of chip types, including:

- › power management;
- › signal processing;
- › MEMS;
- › sensors;
- › discretes, and others.

The industry recently adopted the phrase ‘More than Moore’, to identify and acknowledge a strongly-growing market of various types of analog chips which are not driven by the same Moore’s Law technology scaling inflections of mainstream logic and memory chips. But these ‘More than Moore’ devices often have their own various technology challenges.

PRODUCTS

MARKET COVERAGE

The semiconductor capital equipment market is composed of three major market segments:

- › wafer processing equipment;
- › assembly and packaging equipment; and
- › test equipment.

We are active in the wafer processing segment. Within wafer processing equipment, the major segments are:

- › lithography;
- › CMP;
- › ion implant;
- › deposition;
- › etch & clean; and
- › process diagnostics.

The principal market segment in which we participate is deposition and related tools. Within the deposition market, the major equipment technology segments are:

- › chemical vapor deposition (CVD);
- › physical vapor deposition (PVD);
- › atomic layer deposition (ALD);
- › rapid thermal processing (RTP);
- › epitaxy; and
- › diffusion/furnace.

OUR PRODUCTS

Our products include wafer processing deposition systems for CVD, ALD, epitaxy, and diffusion/furnace. We make two types of process tools: single-wafer and batch. The majority of our business comes from single-wafer tools, which are designed to process an individual wafer in each processing chamber on the tool.

In contrast, a batch tool is designed such that a large number of wafers are processed simultaneously in a larger processing chamber. Batch tools typically achieve a higher throughput compared to single wafer tools.

Single-wafer tools typically achieve a higher level of process performance and control, especially for complex, critical applications. We work closely with our customers to meet their demands, and

in recent years we have developed single wafer tools with multiple chambers configured together in a compact way on a single platform. This approach offers the best of both worlds, combining high productivity and a high level of performance.

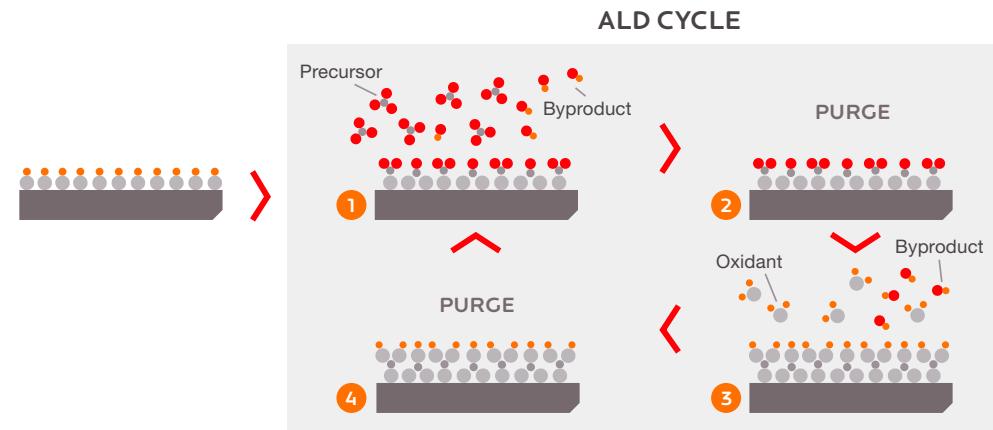
Our XP platform is a high-productivity common 300mm single-wafer platform that can be configured with up to four process modules. The XP platform enables high-volume multi-chamber parallel processing or integration of sequential process steps on one platform. The XP common platform benefits our customers through reduced operating costs, as many of our products use the same parts and consumables, and a common control architecture improves ease of use.

Our XP8 platform follows the basic architectural standards of the XP, but provides even higher productivity with up to eight chambers integrated on a single-wafer platform with a small footprint.

BREAKTHROUGH TECHNOLOGIES

We are a leading supplier of ALD equipment and process solutions for the semiconductor industry. Today, our ALD process technology delivers the highest performance available to support the next generation of semiconductor devices.

ATOMIC LAYER DEPOSITION



INCREDIBLE PRECISION

ALD allows us to deposit thin films atom-by-atom on silicon wafers, meaning we can deliver atomic-scale thickness control, high-quality deposition film properties, and large area uniformity.

With such precision, we can use materials that previously could not be considered, and develop 3D structures that are vital to the future of electronics. 3D technology provides a number of real benefits, including saving space while delivering chips with higher performance that consume less power.

ALD IN VOLUME MANUFACTURING

Our ALD technology is being used to build ICs for a wide range of leading-edge products, including high-performance computers and smartphones. The results of ALD are visible everywhere in the world around us.

ALD is also our basic platform for the development of a wide range of new materials. Our research centers across the globe are working on ALD, and we are conducting joint research projects with Europe's largest independent research institute, imec. Taken together, this helps make ALD one of the principal drivers for future growth in microelectronics.

ALD – A DRIVER OF FUTURE GROWTH

Using ALD, we can deposit new materials several atoms thick on semiconductor wafers, producing ultra-thin films of exceptional quality and uniformity.

In PEALD, plasma is used to provide the reaction energy for the process, enabling us to use lower temperatures for low-thermal budget applications. This technology was introduced in DRAM and planar NAND flash manufacturing in the 3x nm node, for spacer-defined double patterning (SDDP), a technique that can reduce device dimensions, postponing the need for new lithography technologies.

Using ALD technology, we can scale devices to smaller dimensions while reducing the power consumption of transistors, all of which helps the industry follow Moore's Law and create smaller, more powerful semiconductors. For advanced 3D memory applications, where devices are stacked vertically in high densities, ALD is critical for uniformly depositing films in deep trenches and over complicated features. Many new applications are emerging where ALD is the technology of choice, and in a number of cases the only solution that meets the challenging technology requirements.

We expect ALD to be one of the principal drivers of growth in microelectronics over the coming decade. In addition, we expect growth in other deposition technologies, including epitaxy for advanced transistors and PECVD for creating improved interconnects. Looking ahead, we will continue to develop the huge potential of our deposition technologies in support of the semiconductor industry, enabling the industry to support the future demands of consumers and businesses.

EPITAXY

Epitaxy is a critical process technology for creating advanced transistors and memories. The epitaxy process is used for depositing precisely controlled crystalline silicon-based layers that are important for semiconductor device electrical properties. In some cases, the epitaxy films incorporate dopant atoms to achieve specific material properties.

Epitaxy process temperature control is of the utmost importance. We have developed new methods of temperature control in our Intrepid ES epitaxy tool that enable improved film performance and repeatability in volume production. Furthermore, Intrepid's closed-loop reactor temperature control enables enhanced stability in production.

PRODUCT STEWARDSHIP AND PRODUCT LIFE CYCLE MANAGEMENT

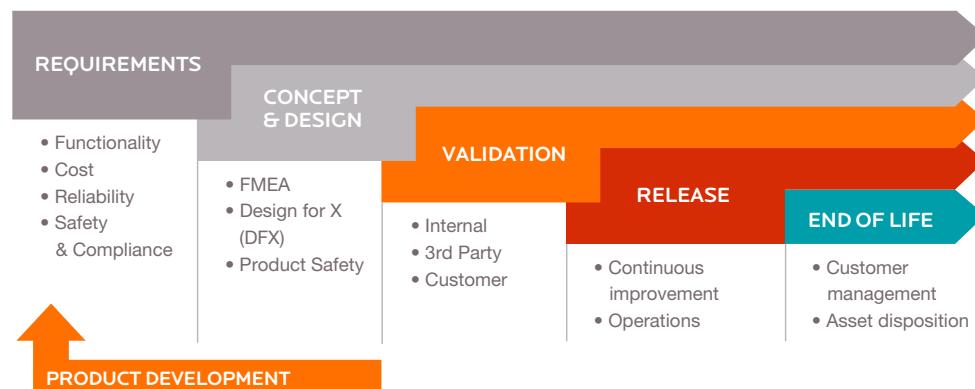
Focusing on product stewardship and product life cycle (PLC) management involves taking responsibility to reduce the product's environmental impact along its entire life cycle, i.e. from cradle to grave. Ultimately, this approach enables us to make products more efficiently and productively for our customers, while extending the products' useful life.

Our product lifecycle process follows the well-established construct of phase-gate product development guided by several key inputs:

- » our collective industry knowledge/experience and subject matter experts;
- » industry/customer requirements and frameworks (such as, customer purchase specs and business requirements); and
- » industry regulations, standards and guidelines.

Product-specific requirements realized from these inputs are documented in market requirement specifications (), which are held as the objectives we need to meet through the product development process. The MRS is continually updated to capture changes to market conditions, regulations and standards, and related specifications.

Governance is provided by the Management Board and their direct staff through key technical meetings (architecture reviews, design reviews and validation reviews) and phase exit meetings through the various lifecycle stages of the product.



PRODUCT SAFETY AND GOVERNANCE

Our product safety policy is part of our global business management system, and is delivered and maintained by our Product Safety Steering Council. This policy defines the requirements, processes, and roles and responsibilities in support of our vision to achieve ZERO HARM! in product safety.

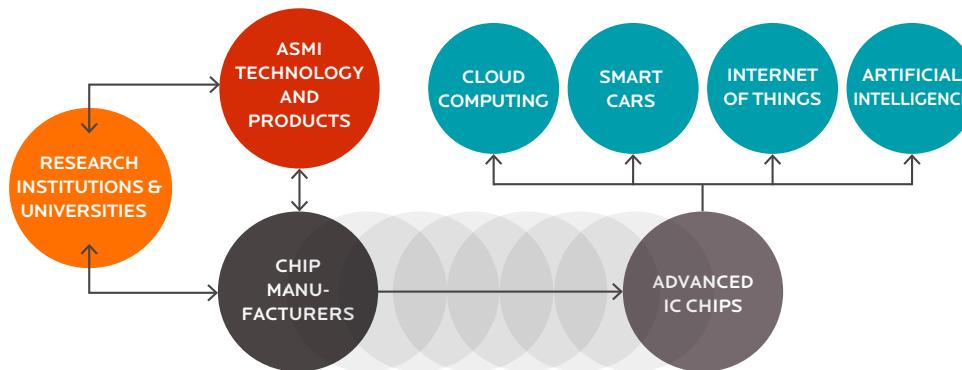
Product safety requirements are defined and maintained by the Product Safety Committee, which includes engineers representing each of the design centers. These requirements are established in the PLC during the requirements phase. The requirements include legislation and standards from the semiconductor industry and customers. During the concept and design phase, as well as safety reviews and safety risk assessments, we verify that safety requirements are being met. Independent third-party validations are done during the validation phase. This helps ensure that our products are safe to operate and maintain, both at our own locations and those of our customers. The Product Safety Committee meets regularly to refine this process and implement continuous improvement opportunities. In addition, we integrate the identification of opportunities for safety design improvements into our global safety reporting system. This system enables our engineers and technicians, who work with our equipment on a daily basis to report opportunities for improvement. These reports are reviewed on a daily basis. Corrective actions, and lessons learned are captured. This data is invaluable in linking the end user with the design process.

Our stakeholders working with our equipment rely on this process of continual assessment, integration, and improvement, to make sure they can work safely with our products.

RESEARCH AND DEVELOPMENT

We have been an innovation leader for 50 years. We not only contribute to the remarkable advance of the semiconductor industry, we help shape the industry itself through our collaborative research and development (R&D) models. This success, and our future success, is largely dependent on our ability to develop new products and new materials, and to improve existing products and materials. Achieving this requires a large commitment to R&D. In 2017 and 2016, our R&D investments were €114 million and €102 million respectively. As of year-end 2017, 497 employees were employed in R&D, representing 26% of our total staff.

DRIVING INNOVATIONS



GLOBAL RESEARCH

As a global company, we carry out R&D on different continents, giving us access to the smartest professionals working in the semiconductor sector today, and bringing our R&D closer to our customers. In our research centers in Belgium, Finland, Japan, the Netherlands, South Korea, and the United States we are active at all stages of our innovations' life cycle, from developing the basic chemistry and materials to implementing improvements on our equipment at our customers' production sites. We also work with specialists across a wide array of disciplines to develop our research goals, including scientists from research institutes, universities, and suppliers.

REGIONAL EXPERTISE

With our R&D activities chiefly conducted in the principal semiconductor markets of the world, we are able to draw on innovative and technical capabilities internationally. Each geographical center provides expertise for specific products or technologies, and interacts with customers on a global scale. This approach, combined with structured and managed interactions between the individual centers, enables the efficient allocation of resources during development and knowledge sharing.

Under the umbrella of our global product development policies, our local activities are directed both towards expanding and improving existing product lines to incorporate technology improvements and reduce product cost and total cost of ownership, as well as developing new products for existing and new markets. These activities require the application of physics, chemistry, materials science, electrical engineering, precision mechanical engineering, software engineering, and systems engineering.

CUSTOMER COLLABORATION

The most important collaborations we have are those with our customers, with whom we co-create and jointly develop technology roadmaps, and new processes and materials when our customers need them for their next products. The diversity in collaborations ranging from early research to pilot production helps us reduce risk as early as possible in the innovation life cycle.

GLOBAL PLATFORM ENGINEERING GROUP AND CORPORATE R&D

A global platform engineering group addresses the needs for common platforms for the various products in our product portfolio. This helps us in driving standardization of hardware and software through the organization. A corporate R&D group consisting mainly of resources in Leuven, Belgium and Helsinki, Finland addresses common needs for advanced process and materials development, and process integration work for the 5nm, 3nm and 2nm nodes, and even beyond.

LOCATION	NUMBER OF R&D EMPLOYEES AS OF DECEMBER 31, 2017, EXCLUSIVE OF TEMPORARY WORKERS
Almere, the Netherlands	35
Leuven, Belgium	28
Helsinki, Finland	27
Phoenix, Arizona, United States	194
Cheonan, South Korea	92
Singapore	4
Tokyo, Japan	117
TOTAL	497

INITIATIVES WITH CUSTOMERS, INSTITUTES AND UNIVERSITIES

As part of our research and development activities, we are engaged in various formal and informal arrangements with customers, suppliers, research institutes and universities.

Next to large scale R&D engagements, we have specific bilateral research activities with several key academic groups at universities in Asia and Europe, typically centric to our core R&D focus on new equipment, material and process developments.

We contribute to several process and equipment development projects at the major Dutch technical universities through the Dutch FOM and STW funding organizations for fundamental and applied research.

We participate in select publicly-funded programs to research and develop technology for semiconductor devices with line widths of 5nm and below, and in 'More than Moore' technologies. We are also involved in several cluster development programs in the Eureka initiative, as a member of the AENEAS association as mentor or reviewer, and in road-mapping activities.

And finally, we occasionally cooperate with other semiconductor capital equipment suppliers in complementary fields, in order to gain knowledge on the performance of our own deposition processes, in cooperation with other processes, either in bilateral or consortia projects.

PATENTS & TRADEMARKS

CAPTURING IDEAS EFFICIENTLY

We expect new deposition technologies and chemistries to be a major driver for new intellectual property (IP) in the future. Patents protect our discoveries and enable us to speak more openly about our inventions and share ideas in the marketplace that benefit our customers. Our patents are usually registered in the principal countries where semiconductor devices or equipment are manufactured and/or sold. Our vision is to increase our value to our customers and shareholders by using our IP in a way that differentiates our products, influences the market, and provides additional monetization opportunities.

CULTURE OF INNOVATION

We have been an innovation leader within the semiconductor industry for 50 years. During that time, we have helped shape the industry through a series of breakthrough innovations in technologies such as ALD, plasma deposition, and epitaxy.

We strive to maintain a culture of innovation at every level of the organization. We attract and retain creative people from around the world, who help us create a steady stream of innovations that we bring to volume manufacturing through close cooperation with our customers.

Our vision is to increase value to the company and our customers through innovations and the use of our IP to differentiate our products. We understand that a failure to adequately protect our IP and/or leakage of our IP could result in the loss of our competitive advantage and adversely impact demand, as well as our financial performance.

We have implemented a robust IP protection program that protects IP for us, our customers, our suppliers and our partners. We train all employees not only on the importance of IP protection, but also on how to recognize and report possible IP infractions. This training is provided to all new hires, and employees are given regular refresher training.

We continue to implement new software, training, and agreements which will allow us to better protect our IP and safeguard our technology developments.

INFORMATION SECURITY

Our technologies, innovations, IP, products and process data, as well as the sensitive information about our customers, suppliers, and employees, are valuable assets. Any breach of our information systems could adversely affect our finances and operating results, as well as our reputation. Information security is a material aspect to us and our stakeholders, and requires the proper controls to protect it.

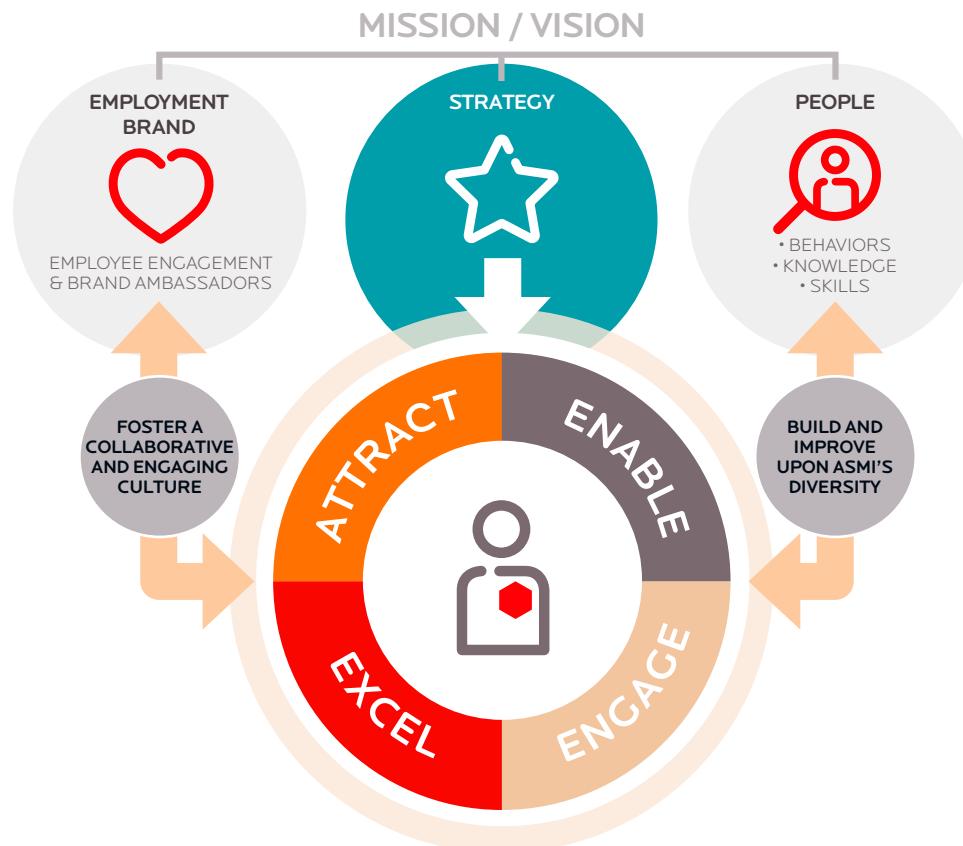
Our approach to information security management includes developing and sustaining a proper global IT security management framework with a policy, processes, and controls to protect against unauthorized system access and loss of valuable information, regardless of location.

In 2017, we continued to assess our position on network security and took steps to enhance the security posture of our global network, improved employee education, and awareness on cyber security/safety, and made infrastructure modernization enhancements.

Our goal is to protect our intellectual property and privacy, while mitigating risks and achieving data security for our customers, employees, and other stakeholders.

PEOPLE AND SOCIETY

Key in our mission to drive innovation and deliver excellence is having the right people; talented people who are able to provide our customers with pioneering solutions and first-class service. People who share our fascination for the future, but want answers today. From the sharpest graduates, to skillful engineers and inspirational leaders.



To be able to realize our ambition to drive innovation and deliver excellence, it is crucial to attract, develop, and retain critical talent. In our innovative industry particular, people are the differentiating element.

To ensure we are able to brand ASMI as global employer of choice in the global labor market, in 2017 we implemented a holistic approach. This approach integrates the mission, vision and strategy of the company with our employment brand and our people.

In the execution of all our people-related actions, we focus on four key areas:

- › attracting the right talented people;
- › enabling our people to fulfill their tasks to the best of their abilities;
- › engaging our people by fostering a collaborative and appealing culture; and
- › helping our people to excel in their personal development and career.

ATTRACTING A DIVERSE WORKFORCE

A key part of attracting and developing the right talent is being an equal opportunities employer. We understand that everyone is unique and recognize and respect the differences between individuals, including ethnicity, religious beliefs, nationality, age, gender, sexual orientation, family status, physical ability, experience, and perspective. This is reflected in our Global Employment Standards and as such is integrated into our recruitment policy, processes, and practices.

Recruiting and developing a diverse workforce gives us a wide range of perspectives, and allows us to explore and adopt new technological ideas and innovations. It also allows us to better understand and meet the needs of our diverse customers, suppliers, and communities. Diversity also enables us to bring a range of different insights together to create breakthrough innovations, turning today's challenges into tomorrow's opportunities. This is supported by our global recruitment policy and process.

ENABLE OUR PEOPLE

To enable our people to fulfill their assignments to the best of their abilities, we use high-quality global processes and tooling that provide managers and employees with access to the services they need 24/7. This includes technical education, as well as leadership trainings, through our leadership academy and a newly introduced online platform.

THE ASMI NEW COLLEGE GRADUATE PROGRAM

To help attract and develop our people, we have established the ASMI New College Graduate (NCG) program. We focus on top graduates with advanced degrees in physics, physical chemistry, chemistry, materials science, and engineering. Working with a select list of universities that focus on the education and training that fit our technology needs, we participate in career events, partnerships, and projects that give us the opportunity to showcase the company. Following their training period, the new graduates begin working at the cutting edge of technology, alongside experienced innovators. Their goal is to resolve some of our toughest scientific challenges. During the first few years of their careers, they are based at one of our innovation centers in Helsinki, Finland, or Leuven, Belgium, before being given the opportunity to apply their knowledge in different product areas at one of our global product development facilities.

THE ASMI LEADERSHIP ACADEMY

Once the right people are attracted, we work hard to ensure they are engaged with the company and its strategic goals, and ensure we provide an enabling environment that allows them to excel and turn today's challenges into tomorrow's opportunities. One example is the ASMI Leadership Academy, which offers our people different leadership programs. Our Leadership Academy helps managers and leaders from all levels of the organization to foster a collaborative and engaging culture and build upon the diversity of their teams. Bringing managers and leaders together in these programs, while using consistent content, has also led to increased understanding and greater cross-cultural and business collaboration.

HELPING OUR PEOPLE ENGAGE AND EXCEL

To accelerate our people's development and career, we focus on two areas: our succession and talent review process and our performance management and development process. Both processes are pivotal in managing and mitigating risks associated with our business operations.

Our global succession and talent reviews are deployed for all critical organizational areas. For those positions that are identified as pivotal to develop our capabilities, we define the required talent-related actions to ensure timely succession and support.

ASMI has implemented a structural performance management and development process. This process supports management and employees to discuss key objectives and competences on a regular basis and is set up as a dialog between manager and employees.

ETHICS

At ASMI, we have adopted a Code of Ethics that sets out clear standards in different areas of business life. Its purpose is to promote a clear, strong and consistent culture of ethics that applies to our Supervisory Board and Management Board, and to all our employees, consultants, contractors, temporary employees, and critical suppliers. The full Code of Ethics can be found on our website.

We continuously promote ethical behaviors and ensure all employees are actively exposed to our Code of Ethics in multiple ways:

- › new hires are trained in the code and associated policies within first weeks of employment;
- › refresher training on ethics topics is conducted annually;
- › articles from Executives and members of the Ethics Committee are published through our global employee newsletter;
- › we post visual awareness reminders at ASMI sites; and
- › a dedicated ethics website is directly accessible via ASMI's Intranet landing page.

Our goal of zero ethical violations is communicated and reinforced through these active engagements. All of these efforts aim to foster ethical behavior in line with our Code of Ethics and in reporting potential violations.

ASMI is committed to conducting business in a manner consistent with the Responsible Business Alliance (RBA) principles to protect our employees, customers, communities, shareholders and the environment.

Our ethics management system provides appropriate resources and tools:

- › anonymous reporting of ethics issues and complaints through an independent third party called SpeakUp!;
- › Global Employment Standards which drive our approach to ethically managing employees, human rights and free labor;
- › whistleblower policies and procedures to prevent amongst others fraudulent behavior in financial reporting;
- › insider trading policies that provide clear rules on trading in ASMI shares;
- › gifts and entertainment protocol and corresponding system set up to prevent conflict of interest; and
- › anti-fraud and corruption practices, which provide clear guidance to prevent fraud and corruption.

SPEAKING UP

Potential violations of our Code of Ethics can be reported through the SpeakUp! process, or directly to management, HR, or the compliance officer. When we receive complaints, these are investigated under the supervision of the Ethics Committee. The SpeakUp! process lets employees, suppliers, customers, and any other stakeholder report ethics issues, concerns or complaints anonymously and in their own language. Independent of the way of reporting, our Code of Ethics includes a non-retaliation policy that applies to any person making use of this process.

We encourage our employees to speak up when they feel ASMI's actions or behaviors within are (potentially) in conflict with the Code of Ethics. An anonymous reporting system is available in all countries in which we operate, in native languages. In all cases and situations, we follow a comprehensive and consistent process to investigate, report and take appropriate measures. This is supported by a non-retaliation policy.



GLOBAL EMPLOYMENT STANDARDS

Our Global Employment Standards (GES) summarize our approach to respecting human rights throughout our global operations and supply chain. They are written with everyone in our value chain in mind.

The GES reflect the principles laid out by the United Nations in the Guiding Principles on Business and Human Rights, and support the RBA Code of Conduct framework including the following:

- › prohibit the use of forced or involuntary labor, including fees of any type to secure employment;
- › prohibit the employment of child labor, ASMI policy specifically does not allow anyone under the age of 18 to be employed at ASMI; and
- › prohibit corporal punishment, threats of violence or other forms of physical or verbal coercion or harassment.

We are committed to updating our management practices to stay compliant with the RBA code as it evolves.

Updates to the global employment standards are communicated to all employees as well as being posted internally and externally on our website.

We believe that everyone deserves to work in an environment free of any threats to their human rights. In 2017, we had no reports or evidence of any human rights violations or abuses within our global hiring or employment practices.

DISCLOSING OUTSIDE EMPLOYMENT ACTIVITIES

ASMI supports employee interests and activities away from the company. For reasons of transparency and to avoid conflict of interest, corruption and bribery, we further formalized ASMI's position through a policy change. Among other things, this policy change means that all employees are to report all outside employment activities prior to any employment activities occurring.

PROVIDING EMPLOYMENT CONTRACTS IN NATIVE OR PREFERRED LANGUAGES

ASMI strengthened its support of prospective employees full understanding of the terms of employment by providing employment contracts in the native or preferred languages.

These terms and conditions, when taken as a whole, contribute to ASMI's approach for respecting human rights. Employees and prospective employees are not in debt to secure employment, they are able to understand the terms of their employment, and are free to sever employment.

HEALTH & SAFETY

Our corporate responsibility policy includes a commitment to a philosophy of ZERO HARM! with respect to the health and safety of our employees, our suppliers, and our customers' employees who work with and around our equipment. The ZERO HARM! philosophy means we strive to prevent injury and illness at our sites and at our customers' sites. This includes providing workplaces with good working conditions, positive reinforcement of health & safety, and proactive programs such as safety management by walking around (SMBWA) audits to prevent incidents. We look to all management to exhibit safety leadership and all employees to report risks and concerns, not only at our sites but in the design and manufacturing of our products. We take a proactive approach to identifying risks and hazards early, and a structural approach to elimination when they are discovered. We use a robust reporting system for identifying gaps and opportunities, and focus on continuous improvement.

We believe that safety is more than just complying with regulations. We have to continually challenge ourselves, our suppliers, our industry, and our customers to be leaders in safety. In an industry such as ours, where there are shared work sites, shared objectives for producing end-user products, and a supply chain that supports our peers and competitors, there is no room for a lapse in safety leadership. When it comes to health & safety, everyone is a stakeholder.

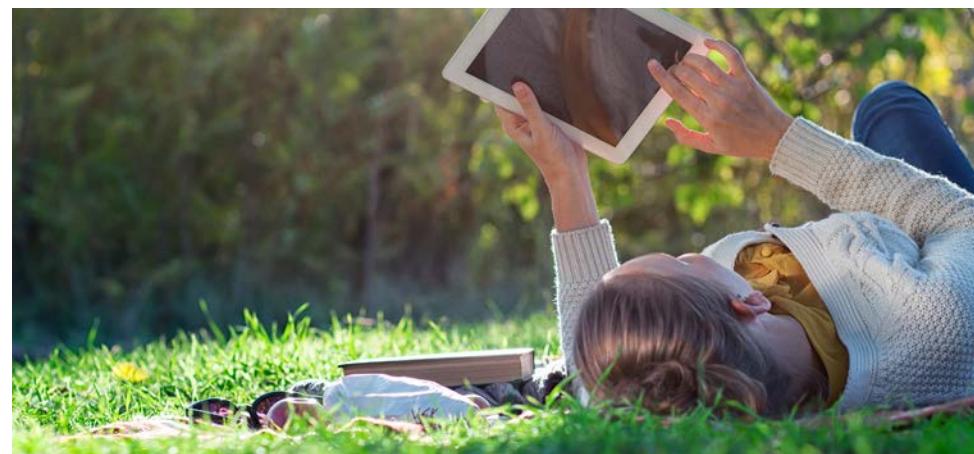
Our attitude to minimizing internal risks follows a similar approach. Through our strategic lab safety, service safety, and manufacturing safety plans, we have implemented working groups comprised of key representatives from the sites and functions. Those working groups are engaged in driving a strategic plan and objectives for each site/function that focuses on multiple dimensions of safety influence, including reduction of physical risks, improvement of procedures, and responding to employee feedback.

ENVIRONMENT

Our technologies enable our customers to provide consumers with more powerful technologies, while lowering energy demands. We align our strategies across the industry, including with customers and industry standards, to focus on key areas including reducing greenhouse gases and water consumption, improving our recycling and reuse of raw materials, and focusing on responsibly designed and operated facilities.

Our enabling technology is not the only approach we take to improve environmental performance. Our ZERO HARM! philosophy drives us to continually improve our environmental performance both in our own operations and in our products, so that our customers realize a reduced environmental footprint.

Our environmental policy is a core element of our overall corporate responsibility Policy. This policy establishes our commitment to reduce our environmental impact by continuously improving our management systems and setting objectives. The policy is not limited to any one aspect of environmental protection, and we will continuously evaluate our performance in areas applicable to our operations and products.



TARGETS

In 2016, we initiated a five-year target cycle for reducing our environmental footprint in key areas that are applicable to our operations and aligned with industry standards, including the Sustainability Accounting Standards Board (SASB) accounting standards for the semiconductor industry. Our environmental targets remain unchanged for 2016-2020 and are:

- › reduce greenhouse gas emissions by 5% per euro of research and development (R&D) investment below 2015 levels by 2020;
- › reduce water consumption by 10% per euro of R&D investment below 2015 levels by 2020;
- › divert more than 90% of all waste from landfill through recycle or reuse by 2020; and
- › all new construction projects to exceed the energy efficiency standards of local jurisdictions.

These targets are aligned with key initiatives across our operations, and leverage our environmental management system which is certified to the ISO 14001 standard to further improve visibility across the company. Over 95% of our realized greenhouse gas emissions are a direct result of scope 2 purchased electricity. We strive to find ways to reduce our electrical consumption where we use it most, at our engineering, and research and development. For example, we commissioned an energy audit in partnership with a local utility at one of our engineering sites, and are exploring the opportunities identified in future objective setting for the targets, objectives and actions taken to support SDG 13: Climate Action.

EVALUATION

Further to the applicable targets, we evaluate our overall environment aspects and impacts, including changes in regulatory aspects, on an annual basis to identify any change in operations or impacts that require inclusion. In 2017, no material changes to our current operations occurred that alters the way we interface with the ecosystem or manage our on-site surface water. We approach new projects with a impact assessment, and strive to minimize identified potential impacts, such as through erosion protection, surface water containment, abatement technologies, and water resource management.

SUPPLY CHAIN

ASMI is engaged in manufacturing products of increasing complexity in a challenging business environment, which requires quick responses to customized solutions. A robust supply chain management system, with a diverse scope and global footprint, becomes critical to meet ASMI business aspirations. This requires our global supply chain organization to continuously drive operational excellence by employing policies, initiatives, and tools to proactively engage our suppliers to ensure business compliance and continuity. These include regular supply and financial risk monitoring, performance management, and Responsible Business Alliance (RBA) commitment from our critical business partners. ASMI's global supply chain organisation is committed to maintaining a supply portfolio that is value creating, sustainable, and ethical.

A DIVERSE GLOBAL SUPPLY CHAIN

Our mission at ASMI is to build a world-class supply chain that provides our customers with the most technologically advanced products, services, and global support network, at a competitive cost of ownership. We partner with hundreds of suppliers who provide goods and services used to manufacture our products and serve our customers. They play a critical role in enabling us to achieve our mission, covering a broad spectrum of commodities across 20+ countries and regions worldwide. The main categories include, but are not limited to, contract manufacturers, precision machining, gas systems, robotics, electronics, and high-tech chemistries. These suppliers manufacture advanced materials to tight tolerances and performance attributes, as required

to achieve our stringent design specifications and requirements. This approach enables us to remain innovative and swiftly meet the challenging demands of our customers.

MANAGEMENT APPROACH

Our supply chain is a critical part of our end-to-end value chain. To fulfill our customers' expectations and requirements, we need to manage our suppliers effectively and ensure that they meet their performance requirements.



Our customers and other stakeholders increasingly expect greater transparency within our supply chain, including how our products are manufactured, whether labor standards are upheld, and workers are treated fairly, and what impact the supply chain has on the environment.

To extend our commitment and approach to corporate responsibility, we use the RBA Code of Conduct as our Supplier Code of Conduct, and we have established management systems for our critical suppliers that match the industry-standard supplier assessment process. By integrating corporate responsibility into our supply chain management process, we believe that we can create long-term business value and further mitigate supply continuity risk.

As part of our supplier relationship management process, we have developed a critical supplier risk assessment process based upon a multitude of criteria. Every year, we assess our supply chain and identify our critical suppliers based on key elements such as, but not limited to, the amount we spend with them, how many similar or alternative suppliers exist, and the amount of time we would need to switch suppliers if we had to.

SUPPLIER EXPECTATIONS

We communicate our expectations and measure conformance to our expectations with our critical suppliers. This approach manages our supply chain risks by focusing on the areas where a majority of our materials come from and spending occurs.

Our critical supplier requirements include, but are not limited to, their commitment to:

- › the RBA Code of Conduct;
- › ASMI's Environmental Health and Safety Policy;
- › ASMI's Code of Ethics;
- › ASMI's Intellectual Property Policies;
- › hazardous materials identification regulations; and
- › conflict materials identification and disclosure.

These requirements are outlined on our public supplier management web page.

INTEGRATED SUPPLIER MANAGEMENT

We believe that building a sustainable supply chain begins with solid business partnerships. Our goal is to find the most capable suppliers in the industry, treat each supplier with respect, and conduct business fairly across all facets of our operations.

By adhering to these principles, we believe we can forge lasting partnerships that will provide long-term benefits to ASMI, our suppliers, our customers, and our stakeholders.

Suppliers who share our vision for an integrated supply chain model routinely demonstrate a commitment to solving many of our customers' challenges. They understand industry dynamics and recognize the need to partner in developing solutions that improve the overall strength of ASMI.

When faced with a particular opportunity, they will quickly use their industry expertise to highlight opportunities and share recommendations, whether technical, commercial or environmental. In many cases, these suppliers can call on a wide variety of global industries and disciplines from which to share best practices. By building a strong relationship with our suppliers, we are able to build upon a foundation of experience and rapidly respond to the business environment.

RISK ASSESSMENT AND MANAGEMENT

We operate globally and have partnerships with suppliers from 20+ countries across Asia, North America, and Europe. We place high expectations on our supply chain when it comes to operational flexibility and responsiveness, and together we must be prepared to respond quickly to a wide range of unplanned events. This requires working proactively with our supply chain partners to ensure they are able to assess and manage risks.

Our supply chain risk management process consists of a combination of critical supplier risk assessments, supplier self-assessments, RBA audits, and training and capability-building activities to help our supply chain be both resilient and responsible.

We actively engage our critical suppliers to drive:

- › RBA Code Compliance and SAQ compliance;
- › business continuity planning;
- › financial risk monitoring; and
- › strategic business reviews.

Consideration is also given to other suppliers that we are actively developing or that have key capabilities.

SUPPLIER DEVELOPMENT AND PERFORMANCE MANAGEMENT

Keeping pace with Moore's Law means the semiconductor industry is advancing at an impressive rate and placing increasing demands on our products. This means we need to make advances

across a number of areas simultaneously, including in material properties, operational capability, manufacturing processes, and capacity management.

These advances and demands are quickly shared with our supply chain, which means we need to continually evaluate our supplier landscape to partner with those suppliers who have demonstrated the right level of business commitment.

We continue to invest in our own capability to meet these increasing challenges, which includes growing our capabilities and resources in our global procurement organization, inclusive of our supplier development and supplier quality engineering teams. These investments are consistent with our commitment to continuous improvement. As part of our supplier selection and recertification process, our supplier engineers perform comprehensive audits, evaluating supplier compliance across a multitude of business elements. In 2017, these audit areas included their employee health and safety, quality management system, ISO compliance, and intellectual property management. During these audits, we had a 93% closure rate on corrective actions.

We are committed to working with each of our suppliers in developing the right technology, operational capability, or investment in capacity. In addition, we are also committed to helping them adhere to our corporate responsibility expectations. For our critical suppliers, we not only communicate our expectations, we also offer free hosted webinars to help them to understand the code requirements and the measurement methods, and to gradually build up their knowledge to enhance their management systems.

CONFLICT MINERALS AND HUMAN RIGHTS

Conflict minerals are those minerals mined in the Democratic Republic of Congo (DRC) or adjoining countries. Profits from the sale of these minerals may directly or indirectly benefit those involved in rebel conflicts and human rights violations. These minerals and the metals created from them – tin, tantalum, tungsten, and gold – can make their way into the supply chains of products used around the world, including the semiconductor industry. As a member of the global community, we have a strong commitment to our sustainability programs, including conflict minerals disclosure requirements, aimed at preventing related human rights violations.

OUR APPROACH

We do not directly source minerals from mines anywhere, including from the DRC or adjoining countries. Our Conflict Minerals Policy, which is published on our website, communicates our commitment to responsible sourcing. To enforce this policy, we developed, and have been executing, our supply chain Conflict Minerals due diligence process annually since 2014.

We joined, and have participated in, the widely-recognized Conflict-Free Sourcing Initiative (CFSI). The CFSI brings together the electronics, automotive, and other industries to jointly improve conditions in the extractives industry (www.conflictfreesourcing.org).

Our programs focus on communicating of our policy, training and surveying our critical suppliers, and collecting supply chain sourcing information on the sources of tin, tantalum, tungsten and gold (3TG) using the industry-standard CFSI template, known as the Conflict Minerals Reporting Template (CMRT). We actively engage with critical suppliers for Reasonable Country of Origin Inquiries (RCOI) and conduct due diligence based on OECD guidance.

OUR PERFORMANCE MANAGEMENT AND GOAL

After we complete our due diligence survey, we carry out detailed data verification and analysis with identified smelters, from whom our critical suppliers source. This process establishes traceability to the smelters and measures the smelters identified with the validated conflict-free smelters (CFS) list published by the CFSI. This helps us ensure that the products and components we source are DRC conflict-free. We encourage all of our suppliers to source 3TGs responsibly, and to use certified conflict-free smelters using recognized certification organizations, such as the Conflict-Free Smelter Program (CFSP). Our goal is to trace all of our critical suppliers and ensure they are using only certified conflict-free smelters, and that our sourcing funds do not finance conflict in the covered countries.

COMPLIANCE WITH LEGISLATION

We are committed to the RBA Code of Conduct, including its commitment to conflict-free sourcing, and will continue our active participation and contribution to the CFSI and our engagement with other relevant stakeholders. These include the European Parliament and other international NGOs, through our engagement with CFSI. Current information on the due diligence process and our policy can be found on our website, in the supply chain section under corporate responsibility.

In November 2016, an agreement was reached by European institutions on the text of an EU Regulation which will require upstream importers, smelters and refiners to conduct due diligence checks from 2021 to ensure they do not source conflict minerals. ASMI is a downstream company, and uses the industry tools to conduct due diligence of our supply chain.

RISK MANAGEMENT APPROACH

Doing business inherently involves taking risks, and ASMI can be adversely affected by a variety of business risks and economic developments. A structured risk management process helps management to better understand how risks might impact the Company and to take appropriate risk mitigation initiatives.

Deploying effective risk management is a key success factor for realizing our strategic objectives as it provides reasonable assurance to prevent material misstatements or losses. ASMI has implemented an internal risk management and control framework.

RISK MANAGEMENT APPROACH

A comprehensive risk management and control framework, based on the 'three lines of defense model', has been established that provides the Audit Committee and the Management Board with a clear overview of the effectiveness of internal controls and risk management. Within the framework, the Management Board is responsible for designing, implementing, and operating an adequately functioning internal risk management and control framework within the company. The objective of this framework is to identify and manage the strategic, operational, financial, financial reporting, and compliance risks to which ASMI is exposed, to promote effectiveness and efficiency in our operations, to promote reliable financial reporting, and to promote compliance with laws and regulations. The Management Board is aware that such a framework can neither provide absolute assurance that its objectives will be achieved, nor can it entirely prevent material errors, losses, fraud, or the violation of laws and regulations.

STRATEGY AND OBJECTIVE SETTING

ASMI's strategy and objectives are described on page 24. During the objective and strategy setting process, the Management Board takes into account the company's known risks and opportunities, and its risk appetite. The objectives and strategy are discussed with the Supervisory Board.

RISK CULTURE

ASMI strives for a culture of openness and transparency in which identified risks are disclosed proactively and unexpected events are reported as soon as they occur. ASMI has established a Code of Ethics (the Code). The Code applies to all ASMI employees and temporary staff. It describes how we work in an open, transparent, honest and socially responsible way. We communicate the Code on our corporate website and our intranet, while new or temporary employees also receive a copy of the Code on their first working day. Annually, via a mandatory online test, all our employees are made aware of the importance of our compliance environment. We have a stringent approach to bribery and corruption, fraud, and all other forms of (illegal) misconduct, including facilitation payments. As well as through the test mentioned, the effectiveness of, and compliance with, the Code is assessed by actively detecting and investigating any alleged misconduct and taking appropriate disciplinary action if misconduct is substantiated. To strengthen the tone at the top and in other management levels, we conduct annual fraud risk assessments. The business control framework contains all corporate policies and guidelines that are mandatory for all of ASMI's activities.

RISK APPETITE

Undertaking business activity inevitably leads to taking risks. Each type of risk encountered is dealt with in a manner that matches the risk appetite of the Management Board. Risk appetite is the level of risk we deem acceptable to achieve our objectives. ASMI's risk appetite is primarily established based on the defined and agreed strategy and the individual objectives within this strategy. Risk appetite is further guided by our Code as well as detailed policies and procedures. The risk appetite is the total residual impact of our risks that ASMI is willing to accept in the pursuit of its (strategic) objectives. The risk appetite per objective or risk area is determined annually by the Management Board. Overall, ASMI's risk appetite did not change materially compared to the previous year.

Our risk appetite differs per risk type:

- › **strategic risks:** we aim to deliver on our strategic ambitions and priorities, and are willing to accept reasonable risks in a responsible way to achieve this taking into account our stakeholders' interests. Innovation will drive future growth. In that respect ASMI is willing to take a higher risk in its key longer-term growth areas, being ALD and epitaxy products;
- › **operational risks:** we face operational challenges which require an appropriate level of management attention. The overall objective is to avoid risks that could negatively impact our goal to achieve operational efficiency, while ensuring our quality standards are unaffected. ASMI has a very low tolerance related to product safety and associated compliance risks. We strive for zero harm;
- › **financial risks:** our financial strategy is focused on a strong financial position and creating long-term value for our shareholders;
- › **legal and regulatory risks:** we strive to be fully compliant with our Code and national and international laws and regulations of the markets in which we operate;
- › **financial reporting risks:** we have effective control frameworks in place to minimize the risk of material misstatements and errors in our financial statements; and
- › **compliance risks:** we are committed to full compliance with relevant laws and regulations and have a zero-tolerance approach to bribery and corruption, fraud, and all other forms of (illegal) misconduct.

RISK ASSESSMENT AND COUNTERMEASURES

ASMI has implemented an effective internal risk management and control system to manage its main risks. The following systems are the main ways that we cover the most relevant risk areas for the Company:

Control system

- › Product safety and EHS
- › Compliance frameworks
- › IT security & continuity
- › Year plan & year outlook
- › Financial framework

Control system objective

- › ZERO HARM!
- › Maintaining licenses to operate
- › Mitigating increasing cyber threats
- › Creating shareholder value
- › Maintaining sufficient liquidity for continuity purposes and shareholder returns

Strategic objectives

Every year we assess the top risks at a consolidated level (top-down approach) and on segment level (bottom-up approach) and, if necessary, we implement countermeasures to mitigate the risks within the defined risk appetite. The business objectives are detailed in a strategic business plan. Every quarter, segments perform a 'most likely' forecast four to six quarters ahead on their main financials and key performance indicators (the rolling forecast). Each month, business management

discusses their actual performance, including updates of the current and next quarter, with the Management Board.

Operational objectives

ASMI has several business continuity plans in place to safeguard the continuity of activities to customers and critical systems and processes. We designed and maintained new control frameworks for safeguarding the reliability of non-financial KPIs, as senior management relies on these KPIs in their decision making. We continuously work on improving our services and processes. Risks related to climate change and compliance with new environmental legislations are incorporated in our risk management and control system. For example, environmental risks are managed in ASMI's business continuity strategy. Our main suppliers comply with the Supplier Code of Conduct. Via this code, suppliers confirm that they support and respect the protection of internationally proclaimed human rights and operate in the spirit of the Charter of the United Nations, for example by preventing discrimination, child labor or forced labor, and by recognizing and respecting the environment in their business operations.

Financial objectives

ASMI's treasury department manages risks related to cash positions, finance agreements, credit ratings, and currency and interest exposures. The treasury department has defined policies with clear boundaries for these risks. Compliance with these policies is monitored frequently.

As part of ASMI's tax strategy, the tax department recommends the most tax-efficient and responsible approach in the interest of all stakeholders, while adhering to ASMI's tax policy and complying with all relevant tax laws and regulations. ASMI does not use artificial tax structures solely aimed at tax avoidance. ASMI proactively engages with tax authorities, and tax exposures (if any) are contained and under control.

Financial reporting objectives

Our financial control framework is designed to prevent and detect material misstatements in ASMI's financial statements in a timely manner. The internal audit department periodically assesses the overall effectiveness of the controls. A disclosure committee examines all reports and documents containing financial information that are intended for external publication, to ensure that these fairly present ASMI's financial position and results.

RISK REPORTING

Business management provides the Management Board with a quarterly assurance letter regarding the reliability of their financial reporting, the effectiveness of their internal controls, risk management, and compliance with internal policies and other laws and regulations.

Summary of main risks and countermeasures

In the next section, we provide a summary of our main risks, the potential consequences and the mitigating measures. It lists the controls that ASMI has implemented to monitor the development of the risks and the realization of our risk appetite. The risks and controls are frequently monitored in regular Management Board meetings. During those meetings, improvement actions, where necessary, are also taken into account.

Internal audit

ASMI's internal audit function assesses the design and effectiveness of the internal risk management and control systems and provides assurance to both the Management Board and the Audit Committee concerning the 'in control' status of ASMI. Moreover, Internal Audit conducts ad hoc financial and operational audits and special investigations.

To ensure the independence of this function, the Director Internal Audit reports to the Management Board and the Audit Committee. The Audit Committee is involved in reviewing and approving the audit plan for the year which the internal auditor executes.

The internal auditor regularly provides updates on its findings to the Audit Committee.

Governance of risk management and compliance

Although the Management Board is ultimately responsible for risk management and compliance, the Management Board is supported by the following three pillars:

- › **business & operations management.** These management functions own and manage risk, and are responsible for maintaining effective controls and for executing risk and control procedures on a daily basis. This involves identifying and assessing risks being undertaken and establishing appropriate controls to mitigate the risks. There are adequate management controls in place to monitor ongoing compliance and to highlight control breakdowns;
- › **oversight functions.** These management functions support business & operations management and help ensure that the risk and control procedures are operating as intended; and
- › **internal audit.** This function provides independent objective assurance on the effectiveness of governance, risk management and internal controls, including the manner in which business & operations management and the oversight functions manage and control risk. Internal audit brings a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes.

Description and evaluation

As set forth by principle 1.2 of the Dutch Corporate Governance Code and related best practice provisions, ASMI has designed and implemented internal risk management and control systems, to identify and manage the risks associated with the Company's strategy and activities. A summary overview of the main internal risk management and control systems was provided in the preceding paragraphs.

MANAGEMENT BOARD



CONTROL EFFECTIVENESS STATEMENT

The Management Board is responsible for ASMI's internal risk management and control framework. This system is designed to manage the main risks that may prevent ASMI from achieving its objectives. However, this system cannot provide absolute assurance that material misstatements, fraud, and violations of laws and regulations can be avoided. The internal risk management and control framework and the evaluation of the effectiveness of our internal controls and areas for improvement are regularly discussed with the Audit Committee and KPMG Accountants, our external auditor. The Audit Committee reports on these matters to the Supervisory Board.

The Management Board conducted an assessment on the design and operating effectiveness of the internal risk management and control systems. During the assessment, several weaknesses and improvement actions were identified. One of the findings related to the dilution effect of the associate ASMPT as disclosed in Note 29 to the Consolidated financial statements. None of the findings were classified as major failings as referred to in the best practice provision 1.4. Based on this evaluation of the effectiveness of the Company's internal control over financial reporting, all members of the Management Board concluded that, as of December 31, 2017, the Company's internal control over financial reporting was effective and provides reasonable assurance for the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. In addition, to the best of the knowledge of the Management Board, the management report includes a fair review of the development and performance of the business and the position of the Company and the undertakings included in the consolidation as a whole, as well as a description of the principal risks and uncertainties that the Company faces. No changes to the Company's internal control over financial reporting have occurred during 2017 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

All internal control systems, no matter how well designed and implemented, have inherent limitations. Even systems determined to be effective may not prevent or detect misstatements or fraud, and can only provide reasonable assurance with respect to disclosure and financial statement presentation and reporting. Additionally, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate due to changed conditions and that the degree of compliance with the policies or procedures may deteriorate.

In view of all of the above, the Management Board believes that it complies with the requirements of best practice provision 1.2 and 1.4 of the Dutch Corporate Governance Code.



RISK CATEGORIES AND FACTORS

In conducting our business, we face a number of risks that may interfere with our business objectives. Some of these risks relate to our operational processes, while others relate to our business environment. It is important to understand the nature of these risks and the impact they may have on our business, financial condition, and results of operations. Some of the more relevant risks are described below, which may not be in order of likelihood or materiality. These risks are not the only ones we face. Some risks may not yet be known to us and certain risks that we do not currently believe to be material could become material in the future.

STRATEGIC RISKS

- › The semiconductor industry is highly cyclical and is subject to rapid technological change. We face intense competition from companies that have greater resources than we do, and potential competition from new companies entering the market in which we compete. Therefore, we invest in research and development, in an effort to compete effectively. Our primary competitors for our wafer processing equipment include Applied Materials, Lam Research Corporation, Tokyo Electron, Hitachi Kokusai, Wonik IPS, and Jusung;
- › We have to recruit or retain qualified personnel or integrate qualified personnel into our organization in order to avoid reduced sales, delayed product development, and diversion of management resources. Our business and future operating results depend in part upon our ability to attract and retain qualified management, technical, sales, and support personnel for our operations on a worldwide basis. Competition for qualified personnel is intense, and we cannot guarantee that we will be able to continue to attract and retain qualified personnel; and
- › The costs to semiconductor manufacturers for switching from one semiconductor equipment supplier to another can be high, therefore it may be more difficult to sell our products to customers having a competing installed base.

OPERATIONAL RISKS

- › The Company derives a significant percentage of its revenue from a small number of large customers. The ten largest customers accounted for approximately 83.1% of net sales in 2017 (2016: 78.5%). Reduction, rescheduling or cancellation of orders would reduce our revenues;
- › Our products generally have long sales cycles and implementation periods, which increase our costs of obtaining orders and reduce the predictability of our earnings. Our products are technologically complex. Prospective customers generally must commit significant resources to test

and evaluate our products and to install and integrate them into larger systems. In addition, customers often require a significant number of product presentations and demonstrations, in some instances evaluating equipment on site, before reaching a sufficient level of confidence in the product's performance and compatibility with the customer's requirements to place an order. As a result, our sales process is often subject to delays associated with lengthy approval processes that typically accompany the design and testing of new products;

- › We outsource a significant portion of the manufacturing of our business to a limited number of suppliers. If our suppliers were unable or unwilling to deliver products in a timely manner to us in the quantities we require, we may be unable to fill customer orders on a timely basis, which could negatively affect our customer relationships and financial performance. We conduct much of our operational activities to our Front-end Manufacturing Singapore (FEMS) facility. If this facility were to experience a manufacturing disruption for any reason, our ability to timely meet our customers' needs may be impaired, which would negatively affect our customer relationships and financial performance; and
- › Our internal information technology systems are a fundamental component of our business operations. In today's world, these systems are subject to compromise by aging and other matters, such as computer viruses, unauthorized access, and general system failures or unforeseen difficulties. Such incidents could result in business disruption and theft of confidential information. We focus on proactive measures to prevent and mitigate such risks.

LEGAL AND REGULATORY RISKS

- › Our success and ability to compete depends a large extent upon protecting our proprietary technology. We rely on a combination of patent, trade secret, copyright and trademark laws, non-disclosure and other agreements, and technical measures to protect our proprietary rights and confidential information. These agreements and measures may turn out not to be sufficient. Our technology may be infringed by third parties. In addition, patents issued to us may be challenged, invalidated or circumvented, rights granted to us under patents may not provide competitive advantages to us. In addition, monitoring unauthorized use of our intellectual property is difficult and we cannot be certain that the steps we have taken will prevent unauthorized use of our technology. The laws of some countries in which our products are or may be developed, manufactured or sold, including various countries in Asia, may not protect our products or intellectual property rights to the same extent as do the laws of the Netherlands and the United States. In past years, there has been substantial litigation regarding patent and other intellectual property rights in our semiconductor and related technology industries. Litigation is sometimes necessary to enforce patents issued to us, to protect trade secrets or know-how owned by us or to defend us against claimed infringement of the rights of others and to determine the scope and validity of the proprietary rights of others. A threat is that third parties may assert that our products infringe their intellectual property;
- › We are party from time to time to various legal proceedings and claims generally incidental to our business, including without limitation to, intellectual property and product liability claims. For each of these proceedings and claims, our management evaluates, based on the relevant facts and legal principles, the likelihood of an unfavorable outcome and whether the amount of the loss can be reasonably estimated, in connection with our determination of whether or not to record a charge to earnings. In 2007, ASMI licensed Hitachi Kokusai under certain of its patents in the field of Atomic Layer Deposition. The license agreement was renewed in 2012. On August 30, 2017, ASMI initiated an arbitration with the American Arbitration Association against Hitachi Kokusai for breach of the license agreement between the parties. At this point of time it is unpredictable when the arbitration will be completed. Following the expiration of the parties' patent license agreement, ASMI filed, on December 1, 2017, a suit for patent infringement against Hitachi Kokusai and its US subsidiary in the US District Court for the Northern District of California. ASMI has asserted infringement of three of its patents and is seeking both an injunction and monetary damages. Hitachi Kokusai subsequently filed suit on December 1, 2017 for alleged patent infringement against ASMI in the US District Court for the Northern District of California. Hitachi Kokusai has asserted seven patents and also seeks an injunction and monetary damages. No specific monetary amount has been requested to date. Thereafter, on February 20, 2018, Hitachi Kokusai initiated litigation in the District of Oregon asserting four patents against ASMI. ASMI is evaluating the allegations in the Oregon action. ASMI will vigorously defend its position in each suit asserted by or against Hitachi Kokusai. Litigation concerning intellectual property rights is complex and usually takes a protracted period of time.

Therefore in connection with these lawsuits ASMI may incur substantial legal fees and costs, and it is not certain that ASMI will prevail in the suits. If ASMI would not be successful in its suits as plaintiff or as defendant, then the potential outcomes may include, without limitation, payment of significant monetary damages, injunctive relief prohibiting sales in the USA, and/or settlement involving significant costs. At this stage it is not possible to predict the outcome of the above mentioned suits, or whether other suits will be started by Hitachi Kokusai. The final outcome could potentially have a material adverse effect on our business, results and financial condition;

- › Our operations are subject to many laws and regulations wherever we operate. To the extent such regulations or directives apply to our business throughout the world, such legislation may adversely affect our business. As with other companies engaged in similar activities, we face inherent risks of environmental liability in our current and historical manufacturing, R&D activities, and operations. Accordingly, costs and regulatory fines associated with such future environmental compliance or remediation obligations could adversely affect our business. We seek to mitigate these risks through preventative and protective practices; and
- › Changes in taxation could affect our future profitability.

RISKS RELATED TO OUR INVESTMENT IN ASM PACIFIC TECHNOLOGY

- › A significant portion of our total assets is composed of our interest in ASMPT. Prior to March 2013, we owned approximately 52% of the outstanding equity of ASMPT, and the assets and operating results of ASMPT were reported by us on a consolidated basis. On March 15, 2013, we disposed of a 12% stake in ASMPT, which reduced our ownership to approximately 40% of the outstanding equity. As a result of this, ASMPT ceased to be a consolidated subsidiary as of that date and our pro rata interest in the net earnings of ASMPT is reported in our Consolidated Statement of Profit or Loss. During 2017, we disposed a stake of approximately 14% in ASMPT. As per December 31, 2017, our interest in ASMPT is 25.18%. Although ASMPT operates in the same industry as ASMI, ASMPT addresses a different segment of the industry, which may involve different market dynamics and competitive factors from time to time, as well as different business risks unique to their operations. ASMPT is a public company traded on the Hong Kong Stock Exchange.

The significant risks currently considered relevant, potential consequences, and applicable mitigating measures can be outlined as follows:

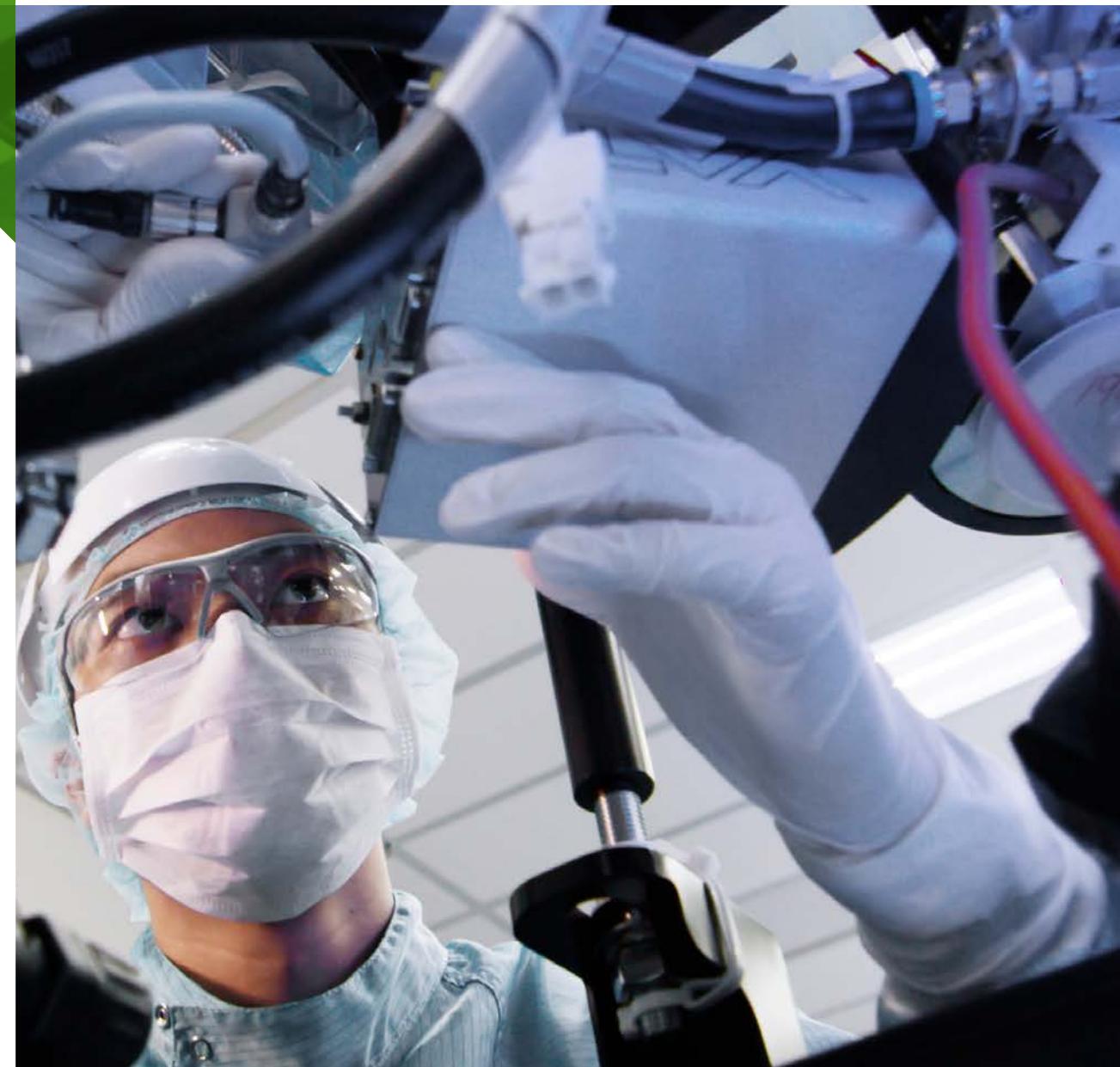
RISK	POTENTIAL CONSEQUENCES	MITIGATING MEASURES
STRATEGIC		
Ability to respond to changes in product demand and technology change	Financial loss due to decreased orders and/or reputation damage	Appropriate investment in R&D initiatives to support both strategic objectives and customer requests
Ability to attract and retain appropriately qualified and experienced personnel	Reduced sales, delayed product development and diversion of management resources	Robust talent management and succession planning programs and tools
Cyclical nature of the semiconductor market	<p>Financial loss due to reduced demand and fixed overheads during industry downturns</p> <p>Abrupt increases in demand for semiconductor devices and insufficient production capacity during industry upturns</p>	<p>Outsourcing generic manufacturing</p> <p>Financial structure, cash, standby credit facility</p>
OPERATIONAL		
Failure to deliver product of sufficient quality or on time	Financial loss due to penalties, rework and/or reduced future demand	<p>Commitment to:</p> <ul style="list-style-type: none"> › delivering quality tools and equipment with robust quality assurance processes and controls in place › timely response to customer requests through 24/7
Dependence on small number of large customers	Loss of a customer or significant reduction in demand could result in significant downturn in financial results	<p>Commitment to:</p> <ul style="list-style-type: none"> › delivering quality tools and equipment with robust quality assurance processes and controls in place › timely response to customer requests › pro-actively working with customers to strengthen relationships and ensure as far as possible we meet expectations
IT security breaches including cyber attacks	Reputation damage and/or financial loss	IT risk management framework
Failure of contract manufacturer to deliver	Financial loss due to penalties, rework and/or reduced future demand	Effective recovery plan in place for contract manufacturers
Disruption of material supplies	Loss of reputation and/or financial loss	Effective recovery plan to ensure continuity of material supplies
Disruption of critical business processes through IT downtime	Potential loss of reputation and/or financial loss	Comprehensive IT recovery plan based on detailed business impact analysis
Environment, health and safety (EHS)	Incidents and accidents	Effective global EHS organization and corrective and preventive action processes to implement structural controls
FINANCIAL		
Financial reporting is not complete or accurate	Reputation damage and/or financial loss	Finance Control Framework
LEGAL AND REGULATORY RISKS		
Non-adherence to laws and regulations	Reputation damage and/or financial loss	Detailed policies and procedures
Failure to adequately protect our Intellectual Property (IP) and/or leakage of our IP	Loss of competitive advantage could adversely impact demand and financial performance	<p>Robust governance framework and controls in place to establish, maintain and protect our intellectual property rights</p> <p>Control framework established to minimize as far as possible the risk of data leakage</p>

PERFORMANCE REVIEW

CHAPTER PREVIEW

OUR RESULTS

- › Financial performance
- › Markets and products
- › Research and development
- › People and society
- › Environment
- › Supply chain



PERFORMANCE REVIEW

CHAPTER PREVIEW

OUR RESULTS

- Financial performance
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- Supply chain

CHAPTER PREVIEW

We performed strongly in 2017, with revenues increasing by 23% to a record high and total new bookings growing by 24% to €774 million.

Revenue growth was driven by customers investing in new ALD applications for the most advanced 3D-NAND device manufacturing, while we also saw strong traction in new product areas in epitaxy and PECVD. The contribution to our equipment sales of both product lines increased during the year.

EXPANDING OUR CUSTOMER BASE

In recent years, we have further broadened our customer base and strengthened relationships with key customers. Revenue from our top-ten customers increased to 83% in 2017, from 79% in 2016.

KEY TECHNOLOGY

Working with our customers, we continued to expand the number of ALD process steps and applications for the most advanced technology nodes. ALD is now firmly established as a key enabling technology. In logic, foundry, and memory, the leading customers have already ramped several technology generations based on our ALD equipment.

FINANCIAL PERFORMANCE

We are an equipment supplier mainly to the semiconductor manufacturing industry. We design, manufacture, and sell equipment and services to our customers for the production of semiconductor devices, or integrated circuits. The semiconductor capital equipment market is composed of three major market segments: wafer-processing equipment, assembly and packaging equipment, and test equipment. Through our Front-end business, we are active in the wafer processing segment. Additionally, as per December 31, 2017, we have a 25.18% stake in ASM Pacific Technology (ASMPT), which is a leading supplier of assembly and packaging equipment to the semiconductor, LED, and electronics markets.

FRONT-END OPERATIONS

We conduct our Front-end business through wholly-owned subsidiaries, the most significant being ASM Front-End Manufacturing Singapore Pte Ltd (FEMS), located in Singapore, ASM Europe BV (ASM Europe), located in the Netherlands, ASM America Inc (ASM America), located in the United States, ASM Japan KK (ASM Japan), located in Japan, and ASM Korea Ltd (ASM Korea), located in South Korea. The locations of our facilities allow us to interact closely with customers in the world's major geographical market segments: Europe, United States, and Asia.

Our wafer processing business supplies equipment to the leading semiconductor manufacturers in the logic, foundry and memory markets, primarily for the deposition of thin films. The logic market is made up of manufacturers who create chips that are used to process data; the foundry market consists of businesses that operate semiconductor fabrication plants to manufacture the designs of other semiconductor companies; and the memory market covers manufacturers who make chips that store information either temporarily or permanently, such as random access memory (RAM). We also supply equipment to leading manufacturers of analog semiconductor devices.

The principal markets that we address in wafer processing are selected segments of the deposition equipment market. The total deposition equipment market was estimated to be US\$11.5 billion in 2017 (VLSI Research, February 2018). Within this market we focus on the following segments: vertical furnaces, epitaxy, PECVD, and ALD. ALD is an advanced technology that deposits atomic layers one at a time on wafers. This process is used to create ultra-thin films of exceptional quality and flatness. Plasma is sometimes used to enhance the process further (Plasma Enhanced ALD, or PEALD) and enables the deposition at reduced process temperature.

BACK-END OPERATIONS

Our investment in ASM Pacific Technology represents the Back-end business. The Back-end operations are conducted through facilities in Hong Kong, the People's Republic of China, Singapore, Malaysia, and Germany. On March 15, 2013, we reduced our shareholding in ASMPT from 52% to around 40%. The sale of the 12% stake in ASMPT caused and required the deconsolidation of ASMPT. Since that date, our share of the net result of ASMPT is reported on the line share in income of investments in associates. In April 2017, we sold a stake of 4.9% and in November 2017 we sold a stake of 9.1% in ASMPT. Our current shareholding in ASMPT is 25.18%.

MOORE'S LAW

A key driver in the semiconductor industry is the continuous demand for smaller, faster, and cheaper semiconductor components. Through technology advances in the manufacturing process, semiconductor manufacturers are continuously scaling chips to smaller dimensions. This enables more transistors to fit in the same physical space, thereby reducing the costs and increasing the speed and performance of a device. Another trend is towards vertical or 3D transistors. This trend also helps to keep the industry on track with Moore's Law (processor speeds, or overall processing power for computers, will double every two years).

ADVANCED DEPOSITION TECHNIQUES

The manufacture of ever-smaller and more complex devices requires more advanced and precise deposit techniques. ALD offers the precision needed to deposit ultra-thin and highly conformal films, even on challenging 3D surfaces. Our portfolio of ALD products is an enabling technology for our customers, helping them to manufacture semiconductor devices at smaller line widths with new materials and 3D architectures. Our technologies support our customers in their roadmap towards chips with a higher performance and reduced energy consumption, which in turn enable the introduction of new and more advanced products ranging from high-end servers to smartphones, wearable devices, and automotive electronics.

STRATEGY

Our strategic objective is to realize profitable, sustainable growth by capitalizing on our innovative strength in deposition technologies and our strong relationships with key customers. We act as a responsible citizen in achieving this.

MARKET DEVELOPMENT

The broader semiconductor wafer fab equipment (WFE) market showed a strong performance with approximately 30% year-over-year growth in 2017. The growth in WFE spending was particularly driven by the memory segment while the logic/foundry segment was relatively stable. Within memory capital spending the growth was highest in the NAND Flash segment, predominantly in the area of 3D-NAND. WFE spending in the DRAM segment also increased following the drop in 2016. The single-wafer ALD market showed a clear improvement in 2017 following the drop in 2016. The single-wafer ALD market was particularly driven by strong increases in memory, while the logic/foundry remained relatively stable at a strong level. The recovery in the DRAM patterning part of the single-wafer ALD was held back by reuse of existing equipment as customer focused on investments within existing facilities.

FINANCIAL RESULTS

The following table shows the operating performance for 2017, versus 2016:

(EUR million)	2016	2017	CHANGE
New orders	622.3	773.6	24%
Backlog	156.7	176.3	13%
Book-to-bill	1.0	1.0	
Net sales	597.9	737.4	23%
Gross profit	264.5	305.9	16%
Gross profit margin %	44.2%	41.5%	
Selling, general and administrative expenses	(91.1)	(99.9)	10%
Research and development expenses	(87.6)	(88.4)	1%
Impairment charges property, plant and equipment and other intangible assets	(3.6)	(4.3)	19%
Operating result	82.2	113.2	38%
Operating margin %	13.8%	15.3%	
Financing income / (expense)	15.0	(30.7)	(45.7)
Income taxes	(2.3)	(4.6)	(2.3)
Net earnings before share in income of investments in associates	95.0	77.9	(17.1)
Share in income of investments in associates	40.5	89.6	49.1
Result from sale ASMLT shares	—	284.9	n/a
Net earnings	135.5	452.4	316.9
Net earnings per share, diluted	€2.21	€7.63	€5.42
Net earnings per share excluding effects from the sale of ASMLT shares	€2.65	€3.21	€0.56

The following table shows certain Consolidated statement of profit or loss data as a percentage of net sales for our operations for 2016 and 2017:

	2016	2017
Net sales	100.0%	100.0%
Cost of sales	(55.8)%	(58.5)%
GROSS PROFIT	44.2%	41.5%
Selling, general and administrative expenses	(15.2)%	(13.6)%
Research and development expenses	(14.6)%	(12.0)%
Impairment charges	(0.6)%	(0.6)%
OPERATING RESULT	13.8%	15.3%
Net interest income (expense)	0.3%	(0.0)%
Foreign currency exchange gains (losses)	2.2%	(4.1)%
Share in income of investments in associates	6.8%	12.2%
Result from sale ASMPT shares	—%	38.6%
EARNINGS BEFORE INCOME TAXES	23.0%	62.0%
Income taxes	(0.4)%	(0.6)%
NET EARNINGS FROM OPERATIONS	22.7%	61.4%

NET SALES

The sales cycle from quotation to shipment for our Front-end equipment generally takes several months, depending on capacity utilization and the urgency of the order. Usually, acceptance is within four months after shipment. The sales cycle is longer for equipment that is installed at the customer's site for evaluation prior to sale. The typical trial period ranges from six months to one year after installation.

Our sales are concentrated in the United States, Europe and Asia. The following table shows the geographic distribution of our net sales for 2016 and 2017:

(EUR million)	YEAR ENDED DECEMBER 31,	
	2016	2017
United States	€145.1	24.3%
Europe	113.8	19.0%
Taiwan	182.8	30.6%
Japan	60.2	10.1%
South Korea	46.8	7.8%
Other Asia	49.2	8.2%
	€597.9	100.0%
	€737.4	100.0%

A substantial portion of our sales is for equipping new or upgraded fabrication plants where device manufacturers are installing complete fabrication equipment. As a result, our sales in this segment tend to be uneven across customers and financial periods. Sales to our ten largest customers accounted for 78.5% and 83.1% of net sales in 2016 and 2017, respectively. The composition of our ten largest Front-end customers changes from year to year. The largest customer accounted for more than 10% of Front-end net sales in 2016 and 2017.

Revenue growth driven by improvement in single-wafer ALD market and new product launches

Our revenue increased by 23% in 2017 to a new record high of €737 million. The impact of currency changes on revenue was a decrease of 2%. Next to strong traction in new product areas in epitaxy and PECVD we benefited from a clear improvement in the single-wafer ALD market in 2017. Our revenue growth was particularly driven by customers' investments in new ALD applications for the manufacturing of advanced generations of 3D-NAND devices. After the strong growth we recorded in 2016 especially in the foundry segment, our ALD sales in the overall logic/foundry segment remained relatively stable in 2017 and were driven by continued capacity investments in the 10-nanometer technology node as well as the first investment in the next 7-nanometer technology. In the DRAM segment our sales remained at a relatively low level following the drop in 2016.

By industry segment, the revenue stream in 2017 was led by foundry, followed by memory and then logic. Within memory, sales were predominantly related to 3D-NAND. In 2016, sales were led by foundry, followed by logic.

In addition to an overall increase in our ALD product line, we achieved strong growth in our epitaxy and PECVD product lines. In epitaxy sales growth was primarily driven by a tool win that we announced in April 2017. This win was from a leading foundry customer that selected our newly-launched Intrepid ES systems for an advanced CMOS application in high volume manufacturing. In PECVD we also recorded a strong increase in our sales in 2017 following a new application win in the 3D-NAND segment.

In 2017, we again made further progress, in cooperation with our customers, to expand the number of ALD process steps and applications for the most advanced technology nodes. ALD is now firmly established as a key enabling technology. In logic, foundry, and memory, the leading customers have already ramped several technology generations based on our ALD equipment.

Our ALD equipment is an enabling technology for spacer-defined multiple patterning, which is used by leading customers in DRAM memory and the logic and foundry market. In addition, ALD is a core technology for high-k metal gate and advanced FinFET applications in the logic and foundry sectors. In the memory market ALD is also increasingly being used for critical process steps in next-generation 3D-NAND devices.

Strong growth in epitaxy and PECVD

In recent years, we have further broadened our customer base and strengthened relationships with key customers.

We recorded strong growth in epitaxy and PECVD and the contribution to our equipment sales of both product lines increased in 2017. Following several years of steady growth in customer deployment and the development of new applications, ALD continues to be a key growth driver for our company. In 2017 we benefited from a clear recovery in the single-wafer ALD market. Our ALD product lines continued to account for clearly more than half of total equipment revenue in 2017.

BOOKINGS

The following table shows the level of new orders for the full year 2017 and the backlog for the same period over 2016:

(EUR million)	YEAR ENDED DECEMBER 31,		
	2016	2017	% CHANGE
BACKLOG AT THE BEGINNING OF THE YEAR	127.8	156.7	23%
New orders	622.3	773.6	24%
Net sales	(597.9)	(737.4)	23%
FX-effect	4.5	(16.6)	
BACKLOG AS PER REPORTING DATE	156.7	176.3	13%
BOOK-TO-BILL RATIO (NEW ORDERS DIVIDED BY NET SALES)	1.0	1.0	

The backlog includes orders for which purchase orders or letters of intent have been accepted, typically for up to one year. Historically, orders have been subject to cancellation or rescheduling by customers. In addition, orders have been subject to price negotiations and changes in specifications as a result of changes in customers' requirements. Due to possible customer changes in delivery schedules and requirements, and to cancellations of orders, our backlog at any particular date is not necessarily indicative of actual sales for any subsequent period.

For the year in total, our new bookings increased by 24% in 2017 to €774 million. The book-to-bill as measured by orders divided by sales remained on the same level (1.0 in 2016 and 1.0 in 2017). Equipment bookings in 2017 for ASMI as a whole were led by the foundry segment, followed by logic, and memory.

Bookings increased to record highs in the first half of 2017 with a level of more than €200 million in both the first and second quarter. Bookings moderated to €160 million in the third quarter and then increased again to €203 million in the fourth quarter of 2017.

We finished the year with an order backlog of €176 million, an increase of 13% compared to the end of 2016.

GROSS PROFIT MARGIN

Total gross profit developed as follows:

(EUR million)	YEAR ENDED DECEMBER 31,			
	GROSS PROFIT		GROSS PROFIT MARGIN	
	2016	2017	2016	2017
Front-end	264.5	305.9	44.2%	41.5%

The gross profit margin decreased to 41.5% in 2017 compared to 44.2% in 2016.

The decrease in gross margin mainly reflects the negative impact from new product introductions and related initial costs in our epitaxy and PECVD activities. This negative impact was mainly reflected in the gross margin in the second half of the year as our sales in the third and fourth quarter included multiple tools of our Intrepid epitaxy system and PECVD tools for new applications. In the first half of 2017 the gross margin was still relatively steady at 43.6% but decreased to 39.6% in the second half.

Excluding the temporary impact from the new product introductions, our gross margin was stable in 2017. This reflects the impact from the programs that have been implemented in the recent years to further improve the efficiency and flexibility of our manufacturing and supply chain operations. These measures included new outsourcing initiatives, a stronger focus on sourcing of complete subassemblies and the migration of a major part of our supply base to Asia. Over time, these measures have contributed to a reduction in the fixed costs part of total costs of goods sold.

Currency changes led to a 2% decrease in gross profit compared to 2016.

SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

Total selling, general and administrative expenses developed as follows:

(EUR million)	YEAR ENDED DECEMBER 31,		
	2016	2017	% CHANGE
Front-end	91.1	99.9	10%

Selling, general and administrative (SG&A) expenses increased by 10% in 2017 compared to the previous year. As a percentage of sales, SG&A expenses were 14% in 2017 and 15% in 2016. SG&A included restructuring expenses of €0.8 million in 2017.

The impact of currency changes on SG&A expenses resulted in a decrease of 1% year-over-year.

RESEARCH AND DEVELOPMENT EXPENSES

Total research and development (R&D) expenses, excluding impairment charges, increased by 2% in 2017 compared to the previous year, mainly driven by additional investments to fulfill customer requirements. As a percentage of sales, R&D expenses decreased to 13% compared to 15% in 2016. Currency changes resulted in a 2% decrease in R&D expenses year-over-year.

Total research and development expenses developed as follows:

(EUR million)	YEAR ENDED DECEMBER 31,		% CHANGE
	2016	2017	
Front-end:			
Research and development expenses	101.5	114.1	12%
Capitalization of development expenses	(26.5)	(38.6)	46%
Research and development grants and credits	(0.8)	(0.3)	(61%)
Amortization of capitalized development expenses	13.3	13.3	-%
	87.6	88.4	1%
Impairment capitalized development expenses	3.6	4.3	19%
TOTAL	91.1	92.8	2%

Impairment of capitalized development expenses related primarily to the development of new technology that is now no longer in-demand from customers.

We continue to invest strongly in R&D. As part of our R&D activities, we are engaged in various development programs with customers and research institutes. These allow us to develop products that meet customer requirements and obtain access to new technology and expertise. The costs relating to prototypes and experimental models, which we may subsequently sell to customers, are charged to the cost of sales.

Our R&D operations in the Netherlands, Belgium, and the United States receive research and development grants and credits from various sources.

OPERATING RESULT

The operating result developed as follows:

(EUR million)	YEAR ENDED DECEMBER 31,		
	2016	2017	% CHANGE
Front-end:			
BEFORE SPECIAL ITEMS	90.7	118.3	30%
Impairment charges	(5.3)	(4.3)	(19)%
Restructuring expenses	(3.1)	(0.8)	n/a
INCLUDING SPECIAL ITEMS	82.2	113.2	38%

Operating profit increased to €113.2 million from €82.2 million in 2016, and the operating profit margin increased to 15.3% from 13.8%.

Impairment charges in 2017 and 2016 related to capitalized development expenditures and assets.

FINANCING COSTS

Financing costs mainly reflect translation results. A substantial part of our cash position is denominated in US dollars.

RESULTS FROM INVESTMENTS

Results from investments, which primarily reflects our shareholding in ASMPT, increased to €112.4 million from €67.7 million in 2016. These exclude the amortization of intangible assets related to ASMPT, as well as the book profit on the stake sales in 2017. During the year, we reduced our stake in ASMPT in two steps from approximately 39% to approximately 25%. ASMI's net earnings included a result of €285 million from the sale of the ASMPT stake.

Total sales as reported by ASMPT increased by 23% to US\$2.2 billion in 2017. Sales of the Back-end equipment business increased 19% in 2017. This growth percentage was impacted by the LED market which contracted in 2017 as customers needed time to digest the new capacity installed in 2016. ASMPT performed very well in segments such as camera image sensors and 3D Sensing, advanced packaging and power management applications. Sales of SMT Solutions increased

by a very strong 31% for the full year driven by automotive, industrial electronics and the latest upgrade cycle in the smartphone market.

ASMPT increased gross margins from 37.6% to 40.2% in 2017. On a 100% basis ASMPT increased net profits by 89%.

INCOME TAX

The income tax expense of €4.6 million (2016: €2.3 million) reflects an effective tax rate of 1.0% (2016: 1.7%). For further information on tax, see Note 20 to the Consolidated financial statements.

NET EARNINGS

Net earnings developed as follows:

(EUR million)	YEAR ENDED DECEMBER 31,		
	2016	2017	CHANGE
Front-end:			
BEFORE SPECIAL ITEMS	103.4	83.0	(20.4)
Impairment charges	(5.3)	(4.3)	1.0
Restructuring expenses	(3.1)	(0.8)	2.3
TOTAL	95.0	77.9	(17.1)
Back-end:			
Investment in ASMPT	67.7	112.4	44.7
Amortization other intangible assets from purchase price allocation	(27.2)	(22.8)	4.4
Result from sale of ASMPT stake	–	284.9	284.9
TOTAL	40.5	374.5	334.0
NET RESULT FROM CONTINUING OPERATIONS	135.5	452.4	316.9
NET RESULT FROM OPERATIONS	135.5	452.4	316.9

CASH FLOW

The following table shows the cash flow statement:

(EUR million)	2016	2017
NET EARNINGS FROM OPERATIONS	135.5	452.4
Adjustments to cash from operating activities:		
Depreciation, amortization and impairments	51.7	52.1
Income tax	2.3	4.6
Share in income of investments in associates	(40.5)	(89.6)
Gain on sale of ASMPT shares	–	(284.9)
Share-based compensation	8.4	7.8
Non-cash financing costs	(2.5)	29.6
Changes in other assets and liabilities:		
Accounts receivable	(43.4)	(37.9)
Inventories	(9.5)	(45.2)
Accounts payable and accrued expenses	7.0	28.4
Other assets and liabilities	(10.2)	2.5
Income tax paid	(7.4)	(3.9)
NET CASH FROM OPERATING ACTIVITIES	91.4	116.1
Capital expenditures (net)	(25.7)	(43.3)
Capitalized development expenditure	(27.3)	(38.6)
Purchase of intangible assets	(7.0)	(2.4)
Dividend received from associates	22.1	36.5
Proceeds from sales of ASMPT shares	–	690.7
NET CASH FROM INVESTING ACTIVITIES	(38.0)	642.8
Purchase treasury shares	(97.0)	(239.6)
Debt issuance fees paid	(0.8)	(0.1)
Proceeds from issuance of treasury shares	14.7	13.3
Dividend paid to shareholders ASMI	(42.7)	(41.5)
NET CASH USED IN FINANCING ACTIVITIES	(125.8)	(267.9)
TOTAL NET CASH PROVIDED / (USED)	(72.4)	491.0

STATEMENT OF FINANCIAL POSITION

Working capital at December 31, 2017 was €180 million (2016: €157 million). Working capital consists of: inventories, accounts receivable, other current assets, accounts payable, provision for warranty and accrued expenses, and other payables. The number of outstanding days of working capital, measured against quarterly sales, decreased from 82 days at December 31, 2016 to 77 days at December 31, 2017.

EMPLOYEES

The following table lists the total number of employees, exclusive of temporary workers:

GEOGRAPHICAL LOCATION	DECEMBER 31,	
	2016	2017
Europe:		
- the Netherlands	141	143
- EMEA	162	171
United States	535	555
Japan	212	228
South Korea	157	221
Singapore	340	395
Asia, other	123	187
TOTAL	1,670	1,900

We had 1,900 employees as per December 31, 2017. The following table lists the number of employees per function:

FUNCTION	DECEMBER 31,	
	2016	2017
Research and development	447	497
Manufacturing	296	361
Marketing and sales	252	268
Customer service	506	597
Finance and administration	169	177
TOTAL	1,670	1,900

Our Dutch operations, which employed 143 staff as per December 31, 2017, is subject to standardized industry bargaining under Dutch law, and is required to pay wages and meet conditions established as a result of negotiations between all Dutch employers in their industry and unions representing employees of those employers. As required by Dutch law, management in our Dutch facilities meet with a works council consisting of elected employee representatives to discuss working conditions and personnel policies, as well as to explain major corporate decisions and to solicit their advice on major issues.

The assembly and packaging segment, ASMPT, had 16,400 employees as per December 31, 2017 (December 31, 2016: 14,360).

SUBSEQUENT EVENTS

Subsequent events were evaluated up to March 16, 2018, which is the issuance date of this Annual Report 2017. There are no subsequent events to report.

LIQUIDITY AND CAPITAL RESOURCES

LIQUIDITY

Our liquidity is affected by many factors, some of which are related to our ongoing operations while others are related to the semiconductor and semiconductor equipment industries, and to the economies of the countries in which we operate. Although our cash requirements fluctuate based on the timing and extent of these factors, we believe that cash generated by operations, together with the liquidity provided by our existing cash resources and our financing arrangements, will be sufficient to fund working capital, capital expenditures and other ongoing business requirements for at least the next twelve months.

On December 31, 2017, our principal sources of liquidity consisted of €836 million in cash and cash equivalents and €150 million in undrawn bank lines.

For the most part, our cash and cash equivalents are not guaranteed by any governmental agency. We place our cash and cash equivalents with high-quality financial institutions to limit our credit risk exposure.

CASH FLOW

We generated cash from operating activities of €116.1 million in 2017 (2016: €91.4 million). We generated cash from investing activities of €642.8 million (2016: €38.0 million used), and used €267.9 million (2016: €125.8 million) in financing activities.

DEBT

We were debt-free as of December 31, 2017.

In December 2016, we finalized the renewal of our current standby revolving credit facility. The security of the previous credit agreement has been released. The maturity date of the new credit commitment of €150 million is December 16, 2021 with an extension option for up to two years. As per December 31, 2017, this facility was undrawn.

The credit facility of €150 million includes two financial covenants:

- › Minimum consolidated tangible net worth; and
- › Consolidated total net debt/total equity ratio.

These financial covenants are measured twice each year, on June 30 and December 31. We were in compliance with these financial covenants as per December 31, 2017.

See Notes 10, 15, and 16 to the Consolidated financial statements for more on our funding, treasury policies and our long-term debt.

ASMPT

The assembly and packaging segment of our business is organized in ASM Pacific Technology Ltd (ASMPT). Net cash of our 25.18%-owned associate was €252 million on December 31, 2017. The cash resources and borrowing capacity of ASMPT are not available to our wafer processing equipment segment.

Although certain directors of ASMPT are directors of ASMI, ASMPT is under no obligation to declare dividends to shareholders or enter into transactions that are beneficial to us. As a substantial shareholder, we can participate in the shareholders' approval of the payment of dividends, but cannot compel their payment or size. Cash dividends received from ASMPT during 2016 and 2017 were €22.1 million and €36.5 million, respectively.

The market value of our 25.18% investment in ASMPT was approximately €1,197 million as per December 31, 2017.

FINANCIAL RISK FACTORS

We are exposed to market risks (including foreign exchange rate risk), credit risk, liquidity risk, and equity price risk. We may use forward exchange contracts to hedge foreign exchange risk. We do not enter into financial instrument transactions for trading or speculative purposes. See Note 16 to the Consolidated financial statements for financial risk factors.

OUTLOOK

We have developed forecasts and projections of cash flows and liquidity needs for the upcoming year. These take into account the current market conditions, reasonable possible changes in trading performance based on such conditions, and our ability to modify our cost structure as a result of changing economic conditions and sales levels. In the forecasts, we have also taken into account: the total cash balances amounting to €836 million on December 31, 2017; the ability to renew debt arrangements and to access additional indebtedness; and whether or not we will comply with our financial covenants. Based on this, we believe that our cash on hand at the end of 2017 is adequate to fund our operations, and our investments in capital expenditures and to fulfill our existing contractual obligations for the next twelve months.

MARKETS AND PRODUCTS

2017 was a year of strong growth for our industry. Worldwide semiconductor industry sales increased by more than 20% and were for a large part driven by favorable market conditions and price increases in the memory segments. The market for wafer fab equipment (WFE) grew by approximately 30%, primarily driven by memory customers.

MARKETS

In 2017 our revenue increased by 23% to a new record level. Single-wafer ALD equipment showed a clear recovery in 2017, with 3D-NAND being the main growth driver. After the drop in 2016, our ALD DRAM business remained at a relatively low level in 2017. Our DRAM business failed to show the recovery in 2017 that we had expected earlier in the year. Investments by DRAM customers increased in 2017 but were mainly made within existing fabs with more reuse of existing equipment as a result. In the logic/foundry segment of the single-wafer ALD market demand remained at a healthy level in 2017 following the strong sales increase that we achieved in 2016 in particular in foundry. During the year we achieved tool-of-record selections for multiple new ALD applications for the 7nm logic/foundry node.

PRODUCTS

NEW PRODUCT INTRODUCTIONS

We launched our new epitaxy tool in 2017, the Intrepid ES and we won our first process tool-of-record selection for the Intrepid ES for an advanced epitaxy application at a leading foundry customer. The new customer win for our Intrepid ES tool drove a strong increase in our epitaxy sales in 2017, which approximately doubled compared to a lower base in 2016. With the successful launch of the Intrepid ES we are substantially increasing our addressable market in epitaxy.

Our technology investments also resulted in a new win in our PECVD activity in the 3D-NAND market, which also contributed to our revenue growth in 2017.

PRODUCT STEWARDSHIP

We made significant progress in our quest for product stewardship in 2017. For example, our engineers developed a key upgrade to our Intrepid epitaxy reactors that allows us to maintain quartz chambers at a constant temperature during deposition. This keeps the chamber clean, eliminating the time and energy needed to perform a clean step after every wafer. This also reduces the environmental footprint in our labs and customer production facilities, as this allows them to extend the time between wafer clean cycles. This reduces the frequency of thermal cycling and exposure to corrosive chemicals.

Another notable improvement in 2017 involves heating the exhaust lines of our key products. This allows toxic effluents to be abated properly via a scrubber rather than being deposited as byproducts in the exhaust lines, which leads to hazardous waste management challenges.

In 2017, we also increased our focus on the responsible disposal of assets by actively sourcing end-of-life products back from the market and refurbishing them in lieu of a new product sale where possible. This extends the life of the equipment and reduces the end-of-life disposal requirements.

RESEARCH AND DEVELOPMENT

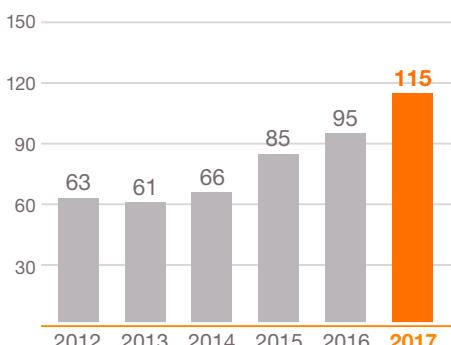
ARRANGEMENTS WITH CUSTOMERS, INSTITUTES AND UNIVERSITIES

As of December 31, 2017, we were engaged in several formal joint-development programs with customers for 300mm applications of our products. As part of these efforts, we may sell new products to customers at a significantly reduced margin, and invest significant resources in the joint development and subsequent product qualification. We also were active in evaluations of our most advanced technologies with selected customers.

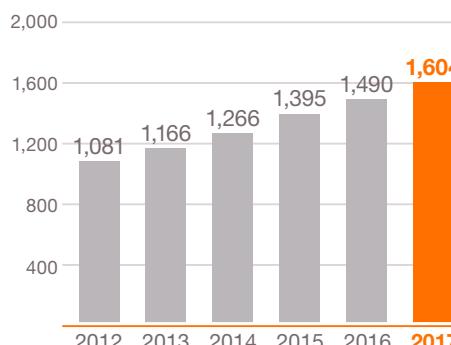
We also enter into research projects with universities and research institutes. In 2017, we renewed our strategic R&D partnership with the Interuniversity Micro-Electronics Center (imec) in Leuven, Belgium, extending into 2022. Essentially all of our 300mm products, and some of our 200mm products, are involved in this partnership. From 2013 through 2017, we significantly expanded our partnership with additional ALD, PEALD, epitaxy, and LPCVD capability. This gives us the opportunity to investigate, both jointly and independently, the integration of individual process steps in process modules and electrically active devices. We have partnered with imec since 1990, with significant on-site representation since 1994.

In December 2003, we commenced a five-year partnership with the University of Helsinki that aims to further develop atomic layer deposition processes and chemistries. This partnership was extended for a second and then a third five-year period.

INITIAL PATENT FILINGS



PATENTS IN FORCE



PATENTS AND TRADEMARKS

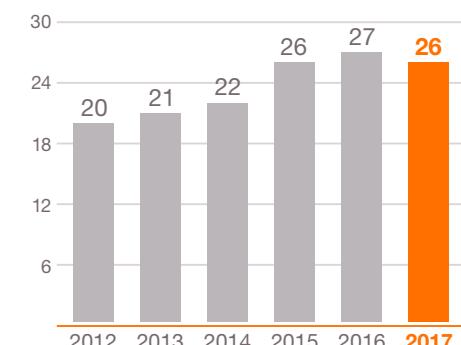
Intellectual property (IP) managers work at all of our major global R&D sites, where they capture patentable material resulting from our R&D activities. We now have over 1,600 patents in force worldwide, with many hundreds of those relating specifically to the ALD process technology platform.

TRADEMARK LIST AS OF DECEMBER 31, 2017

We have registered a number of trademarks covering our product portfolio in the principal countries.

ASM, the ASM International logo, the ASM Qualified Licensed Supplier logo, Advance, Aurora, Axis, Dragon, Eagle, EmerALD, Epsilon, Horizon, Intrepid, Medallion, Polygon, Premium, Pulsar, Silcore and Synergis are registered trademarks of ASM International NV. A400, A412, Loadstar, NCP, XP, and XP8 are our trademarks. ‘Drive Innovation. Deliver Excellence.’ is our service mark.

EMPLOYEES IN R&D in %



PEOPLE AND SOCIETY

In 2017 we were highly successful in recruiting the skilled and talented people we needed to support our company's growth, ranging from technicians building our products, to service engineers delivering high-quality support to our clients and people in R&D driving our innovations.

WORKFORCE

	2014	2015	2016	2017
Employees	1,635	1,597	1,670	1,900
Including external	1,770	1,741	1,770	2,043
Nationalities	26	29	28	29
Male	86%	86%	85%	85%
Female	14%	14%	15%	15%
Voluntary turnover rate	6.1%	6.4%	7.1%	10.4%

Our workforce grew from 1,670 to 1,900 ASMI employees by the end of 2017. In addition to our own workforce, and taking into account fluctuations in demand, we had also hired 143 external employees by the end of 2017.

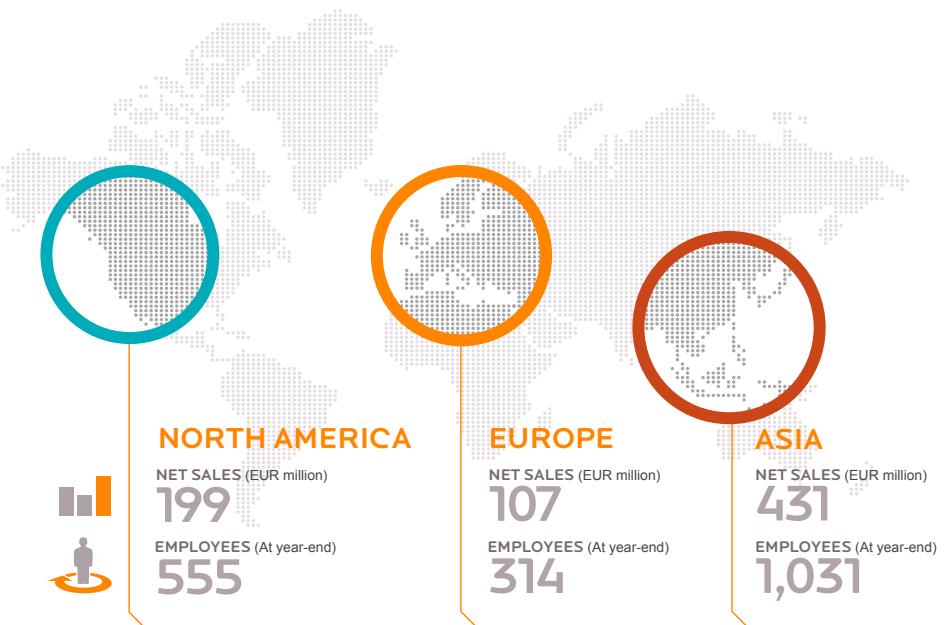
ASMI's global focus and business spread is clearly reflected in the distribution of our new hires. Including turnover replacement, we hired in total 487 new employees in 2017: 23% in the US, 6% in Europe and 72% in Asia.

In 2017 our voluntary turnover rate increased to 10.4%, which although still below the industry benchmark figures, requires our ongoing focus. We attribute this turnover increase to the improving economies and industries in all of our regions, which means compelling alternative jobs are available.

At the same time, our focus on attracting the right talented people and our talent management related actions in developing and retaining the right talent, remain critical given our business requirements and developments in the international labor market. This is when our succession and talent review process is crucial in building a talent pipeline to ensure timely succession in case of turnover.

Through our exit interview process we investigate and analyze reasons for turnover, to help improve our HR processes and policies. The feedback received from exit interviews is also used to drive improvements and help retain talent going forward.

In 2017, we implemented improvements as part of our continuous people development process. We started a new online platform for managers to further develop their managerial skills, using the latest insights on management practices. This will enable managers to improve the quality of their conversations with employees, leading to more engagement and constructive interactions.



Further, we began piloting a comprehensive technical career ladder framework. The model is designed to support the development of our engineers, enhance their capabilities and ensure adequate rewards and recognition for continued performance. We will evaluate this pilot in 2018 and, if deemed successful, will roll it out to a broader target group.

DIVERSITY

ASMI is an equal opportunity employer. We recognize and respect the differences between individuals and we understand that these differences can include ethnicity, religious beliefs, nationality, age, gender, sexual orientation, family status, physical ability, experience, and perspective.

In 2017 we continued to employ a large number of nationalities throughout the company, with 29 different nationalities active in 14 different countries. This diversity is reflected at site levels, meaning that it is normal to work with people from different nationalities on a daily basis. This international dimension is one of the reasons why people appreciate working for ASMI. In terms of gender diversity, 15% of our workforce was female at year-end.

ANNUAL ETHICS SCORECARD

CRITERIA	SCOPE	PERFORMANCE CRITERIA	2017 RESULT
TRAINING	NEW HIRES	Mandatory sign-off on having received, read, understood and agreed to the Code of Ethics	99.8%
	ALL EMPLOYEES	Employees completion of bi-annual refresher training	99.7%
COMPLIANCE	ALL EMPLOYEES	Reported concerns from anonymous global reporting program SpeakUp!	1
		Reported concerns from other channels	5
AWARENESS	GLOBAL	Published articles in internal employee newsletter	3

ETHICS

Our Code of Ethics applies to our Supervisory Board and Management Board, and to all our employees, consultants, contractors, temporary employees and critical suppliers. The Code of Ethics promotes honest and ethical conduct throughout our global operations. The full Code of Ethics can be found on our website.

TRAINING

For new employees, training starts on the day they begin working with ASMI. They are required to familiarize themselves with the Code of Ethics and associated policies and processes within the first week of employment and complete all the required training. In 2017, 99.8% of our new hires signed off on having read, understood and agreed to the Code of Ethics and completed the required training. In addition to the initial training, we also require all our employees to take refresher training every two years. In 2017, 99.7% of all our employees completed the bi-annual Code of Ethics courses.

COMPLIANCE

Under the governance of our Ethics Committee, which reports to the Management Board, we continually track our performance against our goals and improve our ethics management system and performance. We continue to strive for zero ethics violations.

In 2017, one concern was reported through our SpeakUp! system, while five cases were reported via other channels to the Ethics Committee. All incidents were fully investigated and, in those cases involving violations to our Code of Ethics, appropriate actions were taken according to internal policies. The Ethics Committee reviewed all cases and approved the measures taken.

AWARENESS

We work continuously to both increase awareness of and promote ethical behavior. In 2017, we issued three publications to all employees through our global Connect! internal newsletter. The articles highlighted a range of relevant topics, such as IT-related ethical questions, ethics in business, a BU perspective and challenges and opportunities of talent diversification. All articles were written by members of the Ethics Committee together with a business leader accountable for the relevant topic. All of these efforts aim to foster behavior in line with our Code of Ethics and in reporting potential violations.

GIFTS AND ENTERTAINMENT

In 2017, building on guidance taken from our Code of Ethics, we introduced a protocol to further prevent conflict of interest, corruption, and bribery. The protocol provides clear guidance and criteria on when to accept and when to reject a gift or entertainment. The ultimate aim is to avoid employees risking any conflict of interest.

GLOBAL EMPLOYMENT STANDARDS

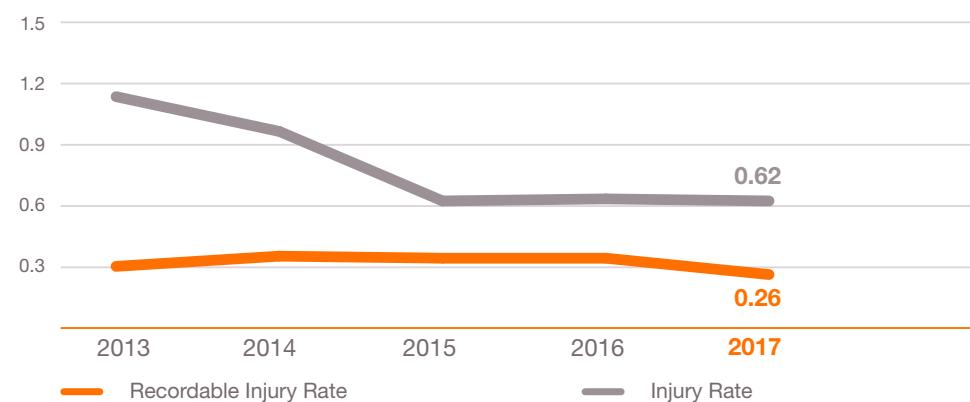
In 2017, we finalized updates to the GES and implemented supporting systems in a number of areas including disclosing outside employment activities and providing employment contracts in native or preferred languages.

HEALTH & SAFETY

Our safety goal is ZERO HARM! Any incident or injury inspires us to push ourselves more to identify the risk and prevent the exposure. We continue to set an annual target that pushes ourselves so that we can ultimately reach ZERO HARM!

Our key performance measures are aligned with our industry and peers, and allow us to benchmark our performance year-on-year. The key measures include an overall injury rate indicator and a recordable injury rate indicator (see Glossary at the end of the Annual Report for full definitions).

GLOBAL INJURY AND RECORDABLE RATES



In 2017, our total injury rate showed a 1.5% improvement from 2016. However, the recordable injury rate, the measure of serious injuries, improved to a record low since we started measuring 11 years ago.

In 2017, we continued to strengthen our own safety leadership, both internally and externally. We deployed our 'BeSAFE – The 6Es of Safety Leadership' framework to our employees.

We believe that focusing on the key elements of safety leadership within the company helps everyone become a safety leader. Together, we work to eliminate the risks and hazards that can lead to safety and health incidents. The model emphasizes this by empowering everyone to lead by example through taking action, an emphasis on eliminating hazards, and means of evaluating performance through surveys and incident rates. In 2017, we initiated a quarterly global safety leadership award that recognizes achievements in demonstrating the attributes of safety leadership. We have started to share this model with key customers during safety leadership collaboration meetings, which we believe will improve safety for our people and customers, as well as our industry overall, and lead to closer collaboration with our customers.



COMMUNITY CONNECTION AND WELL-BEING

One of the most important connections we make is with the communities in which we operate. As a global company, we have roots in local communities in Europe, North America and across Asia. In 2017, we participated in a number of new community efforts, and continued with others we were already involved with. In all cases, we are proud to provide support for programs that are important to our employees and that address important community needs.



CONTRIBUTING TO ZERO HUNGER

In 2017, teams at our Singapore and Phoenix locations, volunteered to help stamp out hunger. The Singapore HR Team members volunteered a half-day's work with the Food from the Heart (FFTH) charity organization. Established in February 2003, FFTH is a non-profit charity that feeds those on low incomes and those in need in Singapore through its

food distribution. In Phoenix, a Global Operations team volunteered at Feed my Starving Children, packaging over 1,000 meals that could be sent around the world.

FURNISHING WITH DIGNITY

In 2017, two of our ASMI teams in Phoenix volunteered at Furnishing With Dignity, a non-profit group that helps families needing support get back on their feet with new furnished homes. The teams spent several hours in the heat packing up trailers for two families that were about to move into new apartments.



BLOOD DONATION

In Singapore, only 1.8% of the population donates blood. To contribute to what is a community necessity, each year ASMI joins a blood donation event. More than 30 employees (out of 395 employees) took part in the event in 2017. The donated blood will be used to save lives in times of emergency and for various medical conditions.



CONNECTING TEENS AND TECHNOLOGY

We embrace innovation challenges. Over the past decade, however, society has begun facing a challenge as the population ages and fewer students are attracted to technical education. Technology industries, including our own semiconductor industry, are facing shortages of talented young engineers, and the expectation is that this will continue unless something is done

to reverse the trend. To help address this issue in the Netherlands, Dutch industry has established a collaboration program between the government and high schools, called JetNet.

JetNet aims to inspire children and teenagers to learn more about technology and to stimulate them to consider a technical education and career. We support JetNet as a partner organization, and joined the platform in 2015 by developing a relationship with Almere High School to promote technology classes. In 2017, we engaged with two high school classes and shared with them some of the diverse problems that we work on at ASMI. Our topics included actual challenges in mechatronics, reliability, and warranty. By showing them the practical application of the theories they are learning at school, we hope to instill a desire to help shape the future of our industry.

In 2017, we continued with our lectures, on-site experiments and technical games at the school, organized an internship, and gave some students the opportunity to visit ASMI to directly understand and respond to our technology challenges.

ASSISTING WITH A UNIQUE OPPORTUNITY

In Singapore, a local school had a unique request that ASMI was glad to help with. The Association for Persons with Special Needs (APSN) runs programs focused on developing individuals with special needs to their fullest potential so that they can lead dignified, fulfilling, and independent lives as integral members of the society. Among their services, they run multiple schools for children.

One of their schools relocated in 2017, but instead of just closing the doors of the old school and opening the doors of the new school, they wanted to hold a symbolic walk to raise the excitement among the children. But how do you safely walk dozens of children with special needs through a busy and bustling city? ASMI volunteered to help, both in scouting the route, planning how to get around obstacles, and providing walkers, crosswalk marshals, and sweepers watching the back of the line on the day of the event. The children arrived at their new school safely and ASMI was honored to have participated in this unique opportunity.

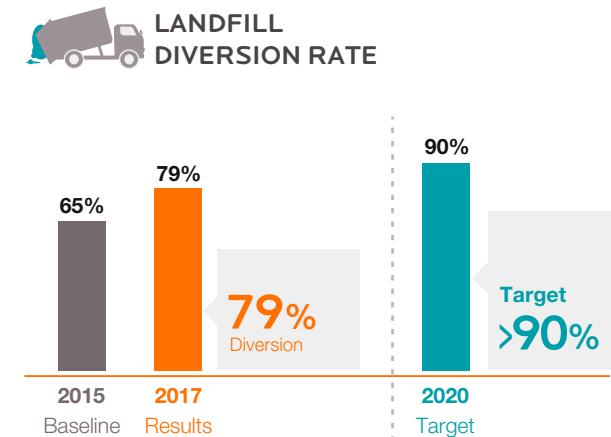
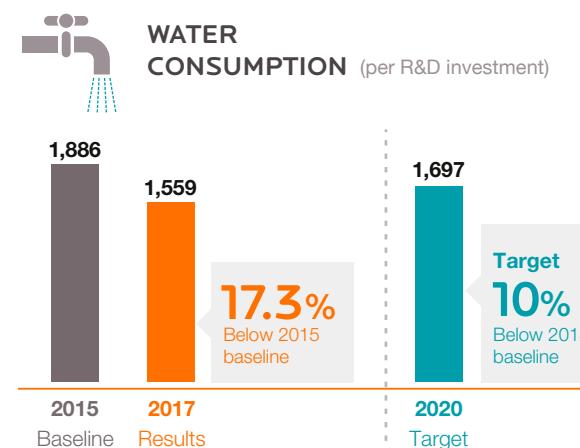
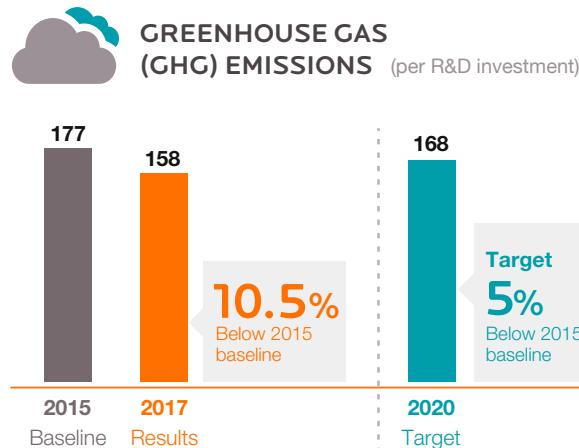
SUPPORTING PEOPLE WITH LIMITED JOB PROSPECTS

As part of ASMI's commitment to corporate social responsibility, ASMI is exploring how to support people with limited job prospects due to their health, mental or physical condition. This initiative is part of the Dutch Prestatieladder Sociaal Ondernemen (PSO) program, the Dutch scheme for social entrepreneurship, to encourage employers to make a sustainable contribution to the job market.

During 2017, an internal analysis was made to identify the potential for formalizing and certifying our efforts. This analysis was executed by certified external experts and covered both the role of ASMI as a social entrepreneur, as well ASMI's role within the supply chain of suppliers and vendors.

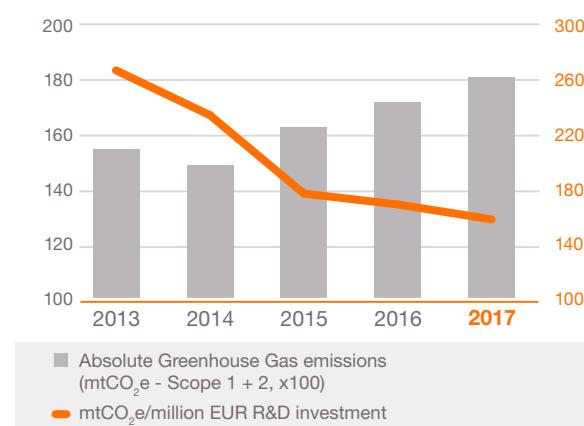
The outcome of the analysis provides ASMI with the required insights to determine a plan of approach to apply for the so-called 'Aspirant status', which is the first level of recognition for the Dutch PSO certificate. We expect to receive the certification in the course of 2018.

ENVIRONMENT



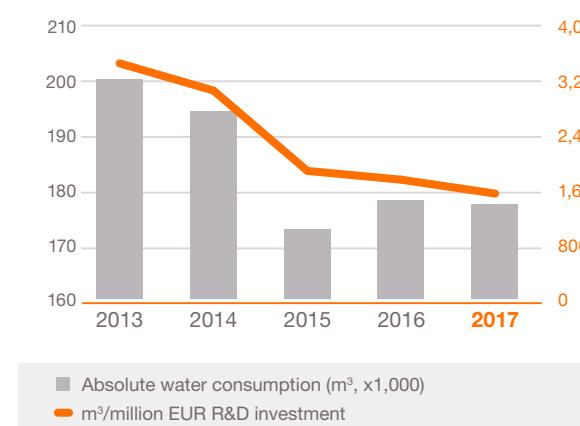
GREENHOUSE GAS (GHG) EMISSIONS

(Absolute and normalized per R&D investment)

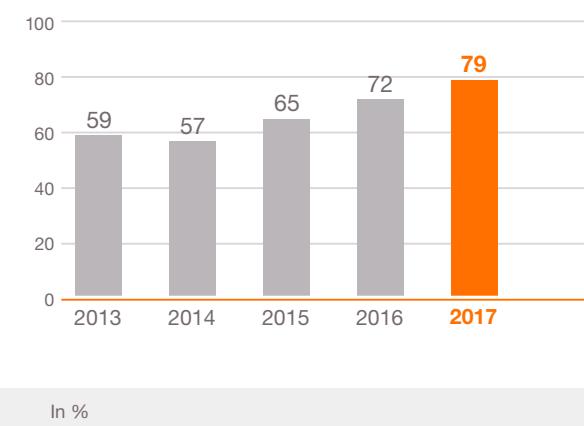


WATER CONSUMPTION

(Absolute and normalized per R&D investment)



LANDFILL DIVERSION RATE



Consistent with our ZERO HARM! vision, we strive to continuously reduce our environmental impact.

Our current environmental performance improvement cycle is from 2016-2020, so we are two years into the cycle. In line with science based targets, we have normalized our greenhouse gas (GHG) emission reduction and our water consumption reduction objectives to our research and development (R&D) spend. Our R&D operations are responsible for a majority of the utility consumption through equipment installations and supporting facility infrastructure.

We have continued to make progress against the objectives. We have exceeded the 5-year objectives in both GHG emissions and water consumption. While this seems early in the cycle, the challenge before us is to ensure the measures taken can be sustained over the target cycle years regardless of changes in R&D spending in years to come. In 2017, we experienced a net increase in the number of process modules in R&D facilities. As a result, absolute electrical consumption increased, leading to an absolute increase in GHG emissions. However, absolute water consumption was reduced. Some initiatives that contributed to the progress toward the normalized objectives include:

- › implementation of water reuse plant;
- › air conditioner replacements serving R&D operations; and
- › conversion to LED lighting.

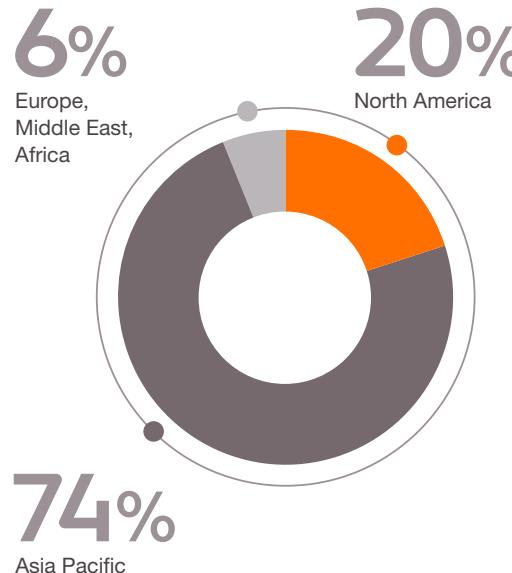
Our landfill diversion progress continues to trend toward the 2020 objective to divert 90% of our materials to recycle or reuse. In 2017, we made progress in the implementation of a crate reuse program through a pilot program with a product line. The program targets the reuse of transportation crates approximately 10 times before needing to dispose of the crating materials. Previously, crates were one-time-use materials. The pilot program contributed approximately a 2% increase towards the landfill diversion results. The opportunity now exists to transfer the process to other product lines through 2020.

Looking forward, we have plans to:

- › replace aging chillers supporting R&D equipment to more efficient (electrical and water consumption) units;
- › replace additional air conditioning systems to more efficient units; and
- › expand crate reuse at manufacturing sites.

SUPPLY CHAIN

SUPPLY CHAIN SPEND BY REGION



In 2017, 85% of our critical suppliers acknowledged our Supplier Code of Conduct.

Our supplier risk assessment process and self-assessments help us identify and measure social, environmental and ethical risks in our supply chain. This helps us better understand how our critical suppliers are performing against the code and standards. We work closely with our critical suppliers to influence corrective actions to ensure continuous improvement. In 2017, 78% of our critical suppliers completed the required self-assessment with low or medium risk, which is equivalent to 92% of our total critical supplier baseline spend.

PERFORMANCE MANAGEMENT

As part of our supplier relationship management process, in 2017 we launched the supplier scorecard to evaluate each of our critical suppliers against a wide range of performance and compliance criteria. Elements such as cost, quality, and delivery, as well as scoring criteria for compliance are tabulated, analyzed and distributed quarterly. Each supplier's performance is reviewed quarterly between the commodity managers and their key supplier counterparts. In addition to this, semi-annual executive business reviews are held to put action plans together to monitor and address any gaps.

On August 14, 2017, ASMI held its first-ever global supplier day, inviting over 50 of our critical suppliers to the event, to deliver industry updates, business unit product insights, and the overall direction of our company. Using our performance scoring criteria as a baseline for results, we publicly recognized our top suppliers for their outstanding contribution to ASMI's success in the prior year. Suppliers who routinely underperform in any area, or who continually demonstrate a risk to our continuity of supply or corporate responsibility, are assessed for removal from our portfolio.

MOVING FORWARD

In 2018, we will continue to identify opportunities to improve supply chain operational efficiency, supplier communication, and supplier training, and embed these in our supplier management system and procedures. We are therefore preparing to revamp our supplier portal and improve our procure-to-pay process, supplier communications related to supply chain initiatives, business requirements, and supplier performance.

GLOBAL SUPPLY CHAIN PROCESS

We are also progressively consolidating our spend with critical suppliers that are supportive of ASMI compliance policies and business needs. Overall spend with these suppliers has increased from 64% in 2016 to 67% in 2017.

GOVERNANCE

CHAPTER PREVIEW

CORPORATE GOVERNANCE

- › Corporate governance principles
- › Management board
- › Supervisory board
- › Supervisory board report
- › Remuneration report
- › External auditor



GOVERNANCE

CHAPTER PREVIEW

CORPORATE GOVERNANCE

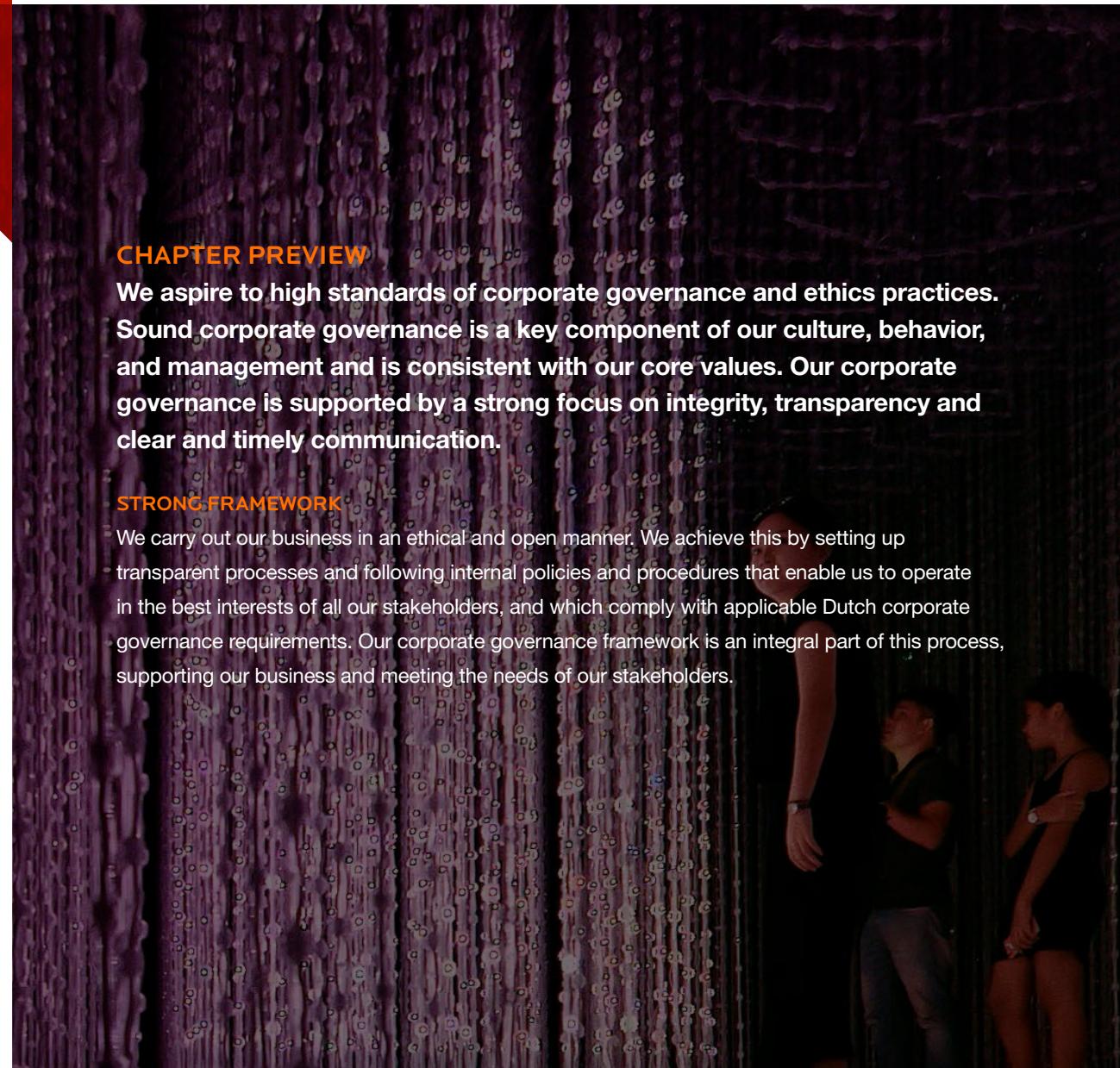
- › Corporate governance principles
- › Management board
- › Supervisory board
- › Supervisory board report
- › Remuneration report
- › External auditor

CHAPTER PREVIEW

We aspire to high standards of corporate governance and ethics practices. Sound corporate governance is a key component of our culture, behavior, and management and is consistent with our core values. Our corporate governance is supported by a strong focus on integrity, transparency and clear and timely communication.

STRONG FRAMEWORK

We carry out our business in an ethical and open manner. We achieve this by setting up transparent processes and following internal policies and procedures that enable us to operate in the best interests of all our stakeholders, and which comply with applicable Dutch corporate governance requirements. Our corporate governance framework is an integral part of this process, supporting our business and meeting the needs of our stakeholders.



CORPORATE GOVERNANCE PRINCIPLES

Good corporate governance is about applying sound business practices. At ASMI we do business in an ethical and transparent manner. We achieve this by setting up transparent processes and following internal policies and procedures that enable us to operate in the best interests of all our stakeholders, and which comply with applicable Dutch corporate governance requirements.

HIGH STANDARD OF CORPORATE GOVERNANCE

ASMI aspires to high standards of corporate governance and ethics practices. Sound corporate governance is a key component of ASMI's culture, behavior, and management and is consistent with our core values. Our corporate governance is supported by a strong focus on integrity, transparency and clear and timely communication. We endeavor to ensure that our policies and procedures comply with both applicable Dutch corporate governance requirements, to the extent possible and desirable, and the relevant laws. Furthermore, our corporate governance structure supports our business and meets the needs of our stakeholders.

COMPANY STRUCTURE

ASMI is a public listed company established under Dutch law. The company's management and supervision structure is organized in a two-tier system, comprising a Management Board, composed of executive directors, and a Supervisory Board, composed of non-executive directors. The Company's Management Board has ultimate responsibility for the overall management of ASMI. The Management Board is supervised and advised by an independent Supervisory Board. The Management Board and the Supervisory Board are accountable to ASMI's shareholders.

ASMI's common stock trades on the Euronext Amsterdam Stock Exchange (symbol ASM) and is required to comply with the Dutch Corporate Governance Code (the Code). The ASMI common shares, which are held in the US as New York Registry Shares, are eligible for trading on the OTC Market under the symbol ASMIY.

Corporate governance-related documents are available on our website, and include:

- › Supervisory Board profile;
- › Supervisory Board rules;
- › Management Board rules;
- › Audit Committee charter;
- › Nomination, Selection and Remuneration Committee charter;

- › remuneration policy;
- › Code of Ethics;
- › whistleblower policy;
- › anti-fraud policy; and
- › rules concerning insider trading.

CORPORATE GOVERNANCE FRAMEWORK



MANAGEMENT BOARD

The Management Board, supervised and advised by the Supervisory Board, manages ASML's strategic, commercial, financial, and organizational matters, and appoints senior managers. The Supervisory Board supervises and advises the Management Board in the execution of its tasks and responsibilities and establishes their individual remuneration within the boundaries of the remuneration policies approved by the Annual General Meeting of Shareholders and the recommendations by the Nomination, Selection and Remuneration Committee.

COMPOSITION OF THE MANAGEMENT BOARD

CHARLES D. (CHUCK) DEL PRADO – CEO

Mr. del Prado was appointed as a member of the Management Board in May 2006 and President and Chief Executive Officer on March 1, 2008. Mr. del Prado was reappointed on May 21, 2014 for a period of four years. Between 1989 and 1996, Mr. del Prado held several marketing and sales positions at IBM Nederland NV. From 1996 to 2001, he worked in various management positions at ASML, in manufacturing and sales in Taiwan and the Netherlands. He was appointed as Director Marketing, Sales & Service of ASM Europe in March 2001. From 2003 to 2007, he was President and General Manager of ASM America. From January 1, 2008 to February 29, 2008, he acted as Executive Vice President Front-end Operations at ASM America. He holds a Master's of Science degree in Industrial Engineering and Technology Management from the University of Twente, the Netherlands. Mr. del Prado is a Dutch national.

PETER A.M. VAN BOMMEL – CFO

Mr. van Bommel was appointed as a member of the Management Board on July 1, 2010 and became Chief Financial Officer on September 1, 2010. Mr. van Bommel was reappointed on May 21, 2014 for a period of four years. Mr. van Bommel has more than twenty years of experience in the electronics and semiconductor industry. He spent most of his career at Philips, which he joined in 1979. From the mid-1990s until 2005, he acted as CFO of several business units of the Philips Group. Between 2006 and 2008, he was CFO at NXP, formerly Philips Semiconductors. He was CFO of Odersun AG, a manufacturer of thin-film solar cells and modules until August 31, 2010. He holds a Master's degree in Economics from the Erasmus University Rotterdam, the Netherlands. Mr. van Bommel is a Dutch national.



From left to right:
Peter A.M. van Bommel, Charles D. (Chuck) del Prado

On April 13, 2016, Mr. van Bommel was reappointed for a period of four years as a member of the Supervisory Board of Royal KPN NV. He also became the Chairman of the Audit Committee as per that day. On April 16, 2015, Mr. van Bommel was appointed as a member of the Supervisory Board of Neways Electronics International NV. Since May 2017, Mr. van Bommel is Executive Director of Stichting Bernhoven.

RESPONSIBILITIES

In addition to the duties of the Management Board stipulated by law and our Articles of Association, the Management Board has the following responsibilities:

- › achieving the aims, strategy, policy and results of the Company;
- › managing the risks associated with the activities of the Company;
- › ensuring proper financing of the Company;
- › establishing and maintaining disclosure controls and procedures that ensure that all major financial information is known to the Management Board in order to ensure that the external financial reporting is achieved in a timely, complete and accurate manner; and
- › determining relevant aspects and achieving aims relating to corporate social responsibility and sustainability.

The Management Board is guided by the interests of the Company, taking the interests of all stakeholders into consideration.

The members of the Management Board are collectively responsible for managing the Company. They are collectively and individually accountable to the Supervisory Board and the Annual General Meeting of Shareholders for executing the Management Board's responsibilities. The Management Board has the general authority to enter into binding agreements with third parties.

The Management Board held various meetings throughout the year 2017. At least once a month, the Management Board meets to discuss and review the performance of the company.

RISK MANAGEMENT AND CONTROL FRAMEWORK

The Management Board ensures that the Company has an adequately functioning internal risk management and control framework. A comprehensive risk management and control framework, based on the "three lines of defense model", has been established that allows the Audit Committee and the Management Board a clear overview of the effectiveness of internal controls and risk management. This is explained in more detail in the risk management chapter on page 54.

The Management Board periodically discusses the internal risk management and control systems with the Supervisory Board and the Audit Committee. The Management Board provides the

Supervisory Board with all information required for the fulfillment of their obligations and the exercise of their powers.

The Management Board provides the Annual General Meeting of Shareholders with all information required for the fulfillment of its obligations and the exercise of its powers in a timely fashion. The Management Board is responsible for the quality and completeness of financial and other reports that are publicly disclosed by or on behalf of the Company, including all reports and documents the Company is required to file.

CONFLICTS OF INTEREST

Each Management Board member shall immediately report any potential conflict of interest to the Chairman of the Supervisory Board and to the other Management Board members. In such cases, a Management Board member shall provide the Chairman of the Supervisory Board and the other Management Board members with all information relevant to the conflict and follow the procedures as set out in the Management Board rules.

APPOINTMENT, SUSPENSION, AND DISMISSAL

The Annual General Meeting of Shareholders (AGM) appoints a Management Board member based on a binding nomination drawn up by the Supervisory Board. The AGM may set aside a binding nomination by a resolution taken with an absolute majority of the votes cast, representing at least one third of the share capital. If such a binding nomination is set aside, a new binding nomination will be drawn up by the Supervisory Board and submitted to a newly called General Meeting of Shareholders. If this binding nomination is set aside, the General Meeting of Shareholders is free to appoint a Management Board member, but only with an absolute majority of the votes cast representing at least one third of our issued capital.

A Management Board member may be suspended at any time by the Supervisory Board. A Management Board member may, in accordance with a proposal by the Supervisory Board, be dismissed by the AGM through a majority vote. A resolution to suspend or to dismiss a member of the Management Board, other than in accordance with a proposal of the Supervisory Board, shall require the affirmative vote of a majority of the votes cast at a meeting. The affirmative votes must represent at least one third of the issued capital.

REMUNERATION

For information regarding the remuneration of the Management Board, please see the remuneration policy which is posted on our website, the remuneration report, which is included in this report, and Note 24 to the Consolidated financial statements.

SUPERVISORY BOARD

The Supervisory Board oversees strategic and commercial policymaking by the Management Board and the way in which it manages and directs ASML's operations and affiliated/associated companies. Members of the Supervisory Board are appointed by the Annual General Meeting of Shareholders upon binding nomination by the Supervisory Board.

COMPOSITION

NAME	POSITION	NATION-ALITY	YEAR OF BIRTH	INITIAL APPOINTMENT	TERM EXPIRES
Jan C. Lobbezoo ^{1) 2)}	Chairman of the Supervisory Board	Dutch	1946	2009	2021
Heinrich W. Kreutzer ¹⁾	Member of the Supervisory Board	German	1949	2006	2018
Martin C.J. van Pernis ²⁾	Member of the Supervisory Board	Dutch	1945	2010	2018
Ulrich H.R. Schumacher ²⁾	Member of the Supervisory Board	German	1958	2008	2020
Stefanie Kahle-Galonske ¹⁾	Member of the Supervisory Board	German	1969	2017	2021

¹⁾ Member of Audit Committee.

²⁾ Member of Nomination, Selection and Remuneration Committee.



JAN C. LOBBEZOO

Mr. Lobbezoo was initially elected as a member of the Supervisory Board in May 2009. He became Chairman of the Supervisory Board in July 2013 and was reappointed as member and Chairman on May 22, 2017 for a period of four years. Mr. Lobbezoo was Executive Vice President and Chief Financial Officer of the semiconductor division of Royal Philips Electronics from 1994 to 2005. He was a member of the Board of Taiwan Semiconductor Manufacturing Company (TSMC) for 12 years until 2007 and remains its adviser, specifically in the areas of US corporate governance, international reporting, and financial review. Currently, Mr. Lobbezoo is a non-executive member of the one-tier Board of Time Acquisition, the holding company of the TMC Group. He is Chairman of the Supervisory Board of 5BY2, a Dutch company active in the supply of automated parking systems. He is also Chairman of the Supervisory Board

of Point One Innovation Investment Fund. He holds a Master's degree in Business Economics from the Erasmus University Rotterdam, the Netherlands, and is a Dutch Registered Accountant (RA) and a member of the Dutch NBA. Mr. Lobbezoo is a Dutch national.



STEFANIE KAHLE-GALONSKE

Mrs. Kahle-Galonske was elected as a member of the Supervisory Board on May 22, 2017 for a period of four years. Since April 2016 Mrs. Kahle-Galonske is CFO of Egon Zehnder International in Zurich, Switzerland. From March 2013 till March 2016, she was CFO of Markem Imaje (industrial automation) at Dover Corporation, based in Geneva, Switzerland. Between

January 2007 and February 2012, she held various senior finance positions at NXP Semiconductors in France and the Netherlands. She started her career in 1997 at Philips Electronics in Hamburg, Germany and held various finance positions till December 2006 at Philips Electronics and Semiconductors in Germany and the US. Mrs. Kahle-Galonske graduated in Economics at Ruhr-University of Bochum, Germany and is a CPA since 2002. Mrs. Kahle-Galonske is a German national.



HEINRICH W. KREUTZER

Mr. Kreutzer was initially elected as a member of the Supervisory Board in November 2006 and was reappointed on May 21, 2014 for a period of four years. Between 1999 and 2003, Mr. Kreutzer was a member of the Management Board as Chief Operating Officer and Chief Technology Officer of Alcatel Germany. From 2004 to 2006, he was Managing Director of Kabel Deutschland GmbH in Munich, Germany. Prior to that he worked at several companies including General Telephone & Electronics in Waltham, US, and Alcatel in Stuttgart, Germany. Mr. Kreutzer was on the Board of Directors of Micronas Semiconductor AG (Chairman) in Zurich, Switzerland, and Micronas Semiconductor GmbH (Chairman) in Freiburg, Germany until

April 2016, and at the Board of BKtel Communications GmbH (Chairman), Germany until the end of 2017. Mr. Kreutzer holds a Master's degree in Engineering and a Master's degree in Economics, and studied at the Technical University of Berlin and the University of Hagen, Germany. Mr. Kreutzer is a German national.

Per the 2018 AGM Mr. Kreutzer will retire from the Supervisory Board after completing three terms of four years. A successor will be appointed.



MARTIN C.J. VAN PERNIS

Mr. van Pernis was initially elected as member of the Supervisory Board in May 2010 and was reappointed on May 21, 2014 for a period of four years. Mr. van Pernis joined Siemens in 1971 and retired from the Siemens Group at the end of 2009 as Chairman of the Management Board of Siemens Nederland NV. Mr. van Pernis is Chairman of the Supervisory Boards

of Batenburg Techniek NV, Aalberts Industries NV, CM Payments, Optixolar BV, Sacon Architects, the Rotterdams Philharmonic Orchestra and Member of the Advisory Board of G4S Netherlands. Mr. van Pernis holds a Master's degree in Electrical Engineering from the Technical University Delft and Technical High School The Hague, the Netherlands, and a Master's degree in Law and Economics from the Erasmus University Rotterdam, the Netherlands. Mr. van Pernis is a Dutch national.

Per the 2018 AGM Mr. van Pernis will have completed 2 terms of 4 years. In order to attain adequate continuity and experience in the Supervisory Board it will be proposed to re-appoint Mr. van Pernis for an additional period of 2 years. This is in line with article 2.2 of the Dutch Corporate Governance Code.



ULRICH H.R. SCHUMACHER

Mr. Schumacher was initially elected as member of the Supervisory Board in May 2008 and was reappointed on May 25, 2016 for a period of four years. From 1986 to 1999, he held various engineering and management positions at Siemens AG. Between 1996 and 1999, he was CEO and President of Siemens Semiconductor Group, and became President

and CEO of Infineon Technologies AG after the spin-off from Siemens Semiconductor Group in 1999. From 2004 to 2007, Mr. Schumacher was a partner at Francisco Partners, a private equity investment company based in the US. Between 2007 and 2016, he was the CEO and President of Grace Semiconductor Manufacturing Corporation. More recently he was Managing Director of CGS DS. From 2012 until the end of 2015, he was Chairman of the Supervisory Board of PACT XPP

Technologies AG. From 2013 till February 2018, Mr. Schumacher was the Chairman of the Executive Board and CEO of Zumtobel Group AG. Mr. Schumacher holds a PhD in Electrical Engineering from the University of Aachen, Germany and has completed further education in Business Administration. Mr. Schumacher is a German national.

THE IMPORTANCE OF DIVERSITY

The Supervisory Board recognizes the value of diversity amongst the members of the Supervisory Board and the members of the Management Board. Diversity is considered in any event to consist of gender, specific knowledge, work background, nationality, age and ethnic diversity, (technical) experience, and skills.

With respect to gender, we strive to have a composition of both the Supervisory Board and Management Board, representing at least 30% of the seats held by either gender at the same time.

RESPONSIBILITIES

The supervision over the policies of our Management Board and the general course of our business, and the related management actions, is entrusted to the Supervisory Board. In our two-tier structure under applicable Dutch law, the Supervisory Board is a separate body independent from the Management Board.

The Supervisory Board supervises and advises the Management Board in executing its responsibilities, particularly regarding:

- › achievement of the Company's objectives;
- › corporate strategy and the risks inherent in the business activities;
- › structure and operation of the internal risk management and control systems;
- › financial reporting process;
- › compliance with legislation and regulations;
- › relation of the Company to its shareholders; and
- › relevant aspects of corporate social responsibility.

The Supervisory Board is responsible for monitoring and assessing its own performance.

CONFLICTS OF INTEREST

A Supervisory Board member facing a conflict of interest shall, in accordance with Article 13 of our Supervisory Board rules, inform the Chairman of the Supervisory Board immediately. The Chairman shall, if possible in consultation with the other members of the Supervisory Board, determine the course of action to be taken.

APPOINTMENT

In accordance with Dutch law and the Corporate Governance Code, the Supervisory Board has drawn up a profile for its own composition. This Supervisory Board Profile is available on our website. For the selection of future members of the Supervisory Board, we will actively seek for candidates that support the realization of diversity on the earlier mentioned criteria. Any appointment or reappointment to the Supervisory Board shall be based on the candidate's match with the Supervisory Board Profile. For reappointment, the candidate's performance during the previous period shall be taken into account. A Supervisory Board member who is available for reappointment must be interviewed by the Chairman of the Nomination, Selection and Remuneration Committee. The Chairman of the Nomination, Selection and Remuneration Committee must be interviewed by the Chairman of the Supervisory Board. All members of the Supervisory Board follow an introduction program after their first appointment, in which financial and legal aspects as well as financial reporting and specific features of ASMI are discussed.

The Supervisory Board shall consist of at least three members. The members should operate independently of each other and within a good relationship of mutual trust. They should be experienced in the management of an international, public listed company, and have sufficient time available to fulfill the function of a Supervisory Board member. The Supervisory Board members appoint a Chairman from among themselves.

The Supervisory Board is currently again composed of five members, after Mrs. Kahle-Galonske was elected as a member of the Supervisory Board in May 2017. Mr. Lobbezoo was reappointed as member in May 2017 in order to attain adequate continuity and experience in the Supervisory Board.

All members of the Supervisory Board meet the required profile. Supervisory Board members serve in principle a four-year term and may be re-elected in line with article 2.2 of the Corporate Governance Code.

REMUNERATION

For information regarding the remuneration of the Supervisory Board, please see the remuneration report, which is included in our Annual Report 2017, and Note 24 to the Consolidated financial statements.

COMMITTEES

In order to more efficiently fulfill its role and in compliance with the Code, the Supervisory Board has created two committees: the Audit Committee and the Nomination, Selection and Remuneration (NSR) Committee.

AUDIT COMMITTEE

The Audit Committee assists the Supervisory Board in its responsibility to oversee ASMI's financing, financial statements, financial reporting process, and system of internal business controls and risk management. The Audit Committee advises the Supervisory Board for the nomination of the external auditor of the Company.

The Audit Committee consists of:

- › Heinrich Kreutzer (Chairman);
- › Jan Lobbezoo; and
- › Stefanie Kahle-Galonske.

Mr. Schumacher was a member of the Audit Committee until Mrs. Kahle-Galonske joined the Supervisory Board and the Audit Committee, upon which Mr. Schumacher switched to become a member of the NSR Committee.

The Audit Committee supervises the activities of the Management Board with respect to:

- › the structure and operation of the internal risk management and control systems, including supervision of the enforcement of the relevant legislation and regulations;
- › the role and functioning of internal audit;
- › policy on tax planning;
- › the applications of information and communication technology;
- › financing of the Company;
- › compliance with recommendations and observations of internal and external auditors;
- › release of financial information; and
- › relations with the external auditor, including, in particular, its independence, remuneration, and any non-audit services performed for the Company.

The Audit Committee meets periodically to:

- › consider the adequacy of the internal control procedures;
- › review the operating results with management and the independent auditors;
- › review the scope and results of the audit with the independent auditors;
- › review the scope and results of internal audits with internal audit;
- › review performance evaluations relating to the auditor's independence;
- › review performance and services of the external auditor; and
- › review adequateness of the financing structure and tax planning of the Company.

The Chief Executive Officer, Chief Financial Officer, Director Internal Audit, Corporate Director Group Control, and representatives of the external auditor are invited to, and also attend, the Audit Committee meetings.

Mr. Lobbezoo, Chairman of the Supervisory Board, and Mrs. Kahle-Galonske, member of the Supervisory Board, are both members of the Audit Committee and are the Supervisory Board's financial experts, taking into consideration their extensive financial background and experience.

NOMINATION, SELECTION AND REMUNERATION COMMITTEE

The Nomination, Selection and Remuneration Committee (NSR) Committee advises the Supervisory Board on matters relating to the selection and nomination of the members of the Management Board and Supervisory Board. The NSR Committee further monitors and evaluates the Remuneration Policy for the Management Board.

The NSR Committee consists of:

- › Martin van Pernis (Chairman);
- › Jan Lobbezoo; and
- › Ulrich Schumacher.

The NSR Committee ensures that a competitive remuneration structure is provided by benchmarking with other multinational companies of comparable size and complexity operating in comparable geographical and industrial markets. The NSR Committee evaluates the achievement of performance criteria specified per Management Board member. After the evaluation, it recommends the level of remuneration to the Supervisory Board.

On an annual basis, the NSR Committee reports to the Supervisory Board on the application of the remuneration policy in the previous year and recommends the remuneration policy for the following years.

The Chief Executive Officer and the Corporate Vice President Global Human Resource are invited to, and also attend, the NSR Committee meetings.

SUPERVISORY BOARD REPORT

During the year under review, the Supervisory Board performed its duties in accordance with applicable legislation and the Articles of Association of ASM International NV and supervised and advised the Management Board on an ongoing basis.

FINANCIAL STATEMENTS

We present the ASMI 2017 Annual Report in accordance with IFRS, as prepared by the Management Board and reviewed by the Supervisory Board. Our independent auditors, KPMG Accountants NV, have audited these financial statements and issued an unqualified opinion. Their report appears on pages 161 to 167.

All of the members of the Supervisory Board have signed the financial statements in respect of the financial year 2017.

SUPERVISION

Supervision of the Management Board, its policy decisions and actions are entrusted to the Supervisory Board. In accordance with Dutch law, the Supervisory Board is a separate body, independent of the Management Board. The Supervisory Board supervises and advises the Management Board in executing its responsibilities. The profile of the Supervisory Board describes the range of expertises that should be represented within the Board. The procedures of the Supervisory Board and the division of its duties are laid down in the Supervisory Board rules. Both documents are available on our website www.asm.com.

MEETINGS OF THE SUPERVISORY BOARD

During 2017, the Supervisory Board met with the Management Board on seven occasions, and in one conference call. Heinrich Kreutzer, Martin van Pernis, and Ulrich Schumacher attended all Supervisory Board meetings with the Management Board, while Jan Lobbezoo attended all meetings except one and Stefanie Kahle-Galonske attended all meetings since her appointment.

SUPERVISORY BOARD MEMBERS' MEETING ATTENDANCE

Committee	Supervisory Board	Audit Committee	Nomination, Selection and Remuneration Committee (NSR)
Jan C. Lobbezoo	7/8	4/4	1/1
Heinrich W. Kreutzer	8/8	4/4	-
Martin C.J. van Pernis	8/8	-	1/1
Stefanie Kahle-Galonske	6/6	2/2	-
Ulrich H.R. Schumacher	8/8	1/2	1/1

Attendance is expressed as the number of meetings attended out of the number eligible to be attended.

In these meetings, the Boards discussed the strategy and the progress of implementation thereof, operations, business risks, product and market developments, the Company's organization, management and financial structure, and performance, including further profitability improvements. The developments in corporate governance in general and the Corporate Governance Code specifically were discussed and reviewed. Other topics addressed by the Supervisory Board were the annual budget, the review of quarterly financial results and the preparation of the quarterly earnings press releases. The Supervisory Board also approved the dividend proposal as prepared by the Management Board and proposed at the AGM in 2017.

One of the meetings was specifically earmarked to discuss with the Management Board the long-term strategy of the company, the planned implementation of it, and the risks attached to its realization. In the long-term strategy meeting the Board discussed the semiconductor and semiconductor equipment market and outlook, the development of ASMI's market share, the development of the competitive environment, technology and market trends, the progress with ASMI's strategic priorities and ASMI's long-term revenue and profit or loss forecasts. Also, strategic initiatives to be considered to improve the Company's long-term value creation strategy were discussed. Certain topics discussed during the long-term strategy discussion will be followed up in subsequent meetings of the Board during 2018.

In addition, the Supervisory Board reviewed and discussed the functioning of the Supervisory Board, its committees, and its individual members through an internal assessment as conducted by the members of the Supervisory Board. The composition, competencies and functioning of the Supervisory Board, as also described in the Supervisory Board profile, and its committees were part of the assessment, as well as the composition of the Management Board, their performance, and the performance of its individual members, and the relationship between the Supervisory Board and the Management Board. The conclusion of the assessment was that both the Supervisory Board as the Management Board function properly and effectively, in addition some suggestions came up for future Supervisory Board meetings.

CORPORATE GOVERNANCE

Included in the responsibilities of the Supervisory Board is to oversee the Company's compliance with corporate governance standards and best practices. The Supervisory Board is of the opinion that the Company complies with the Dutch Corporate Governance Code.

SHAREHOLDERS

On April 24, 2017, the Company announced it would sell a stake of 20 million shares of the total outstanding share capital in ASM Pacific Technology Ltd. (ASMPT) through a partial secondary share placement. The offering generated cash proceeds for ASMI of a total amount of approximately €245 million. Following the divestment, ASMI owned approximately 34% of the shares in ASMPT.

On September 22, 2017, the Company announced that it will commence a share buyback program of ASMI's common shares up to €250 million.

Then on November 2, 2017, the Company further announced that it intended to sell a stake of 37 million shares of the total outstanding share capital in ASMPT through a partial secondary share placement, representing a stake of approximately 9% in ASMPT. The Company announced its intention to distribute a part of the proceeds to its shareholders in the form of a tax efficient capital return. The offering generated cash proceeds for ASMI of a total amount of approximately €445 million.

SUPERVISORY BOARD COMPOSITION

The Supervisory Board is composed of five members. In May 2017, Mrs. Kahle-Galonske was elected as a member of the Supervisory Board for a period of four years. All five members are independent, in line with the Corporate Governance Code.

MANAGEMENT BOARD COMPOSITION

The Management Board remains composed of two members. During 2017, no changes took place in its composition.

DIVERSITY

The Supervisory Board recognizes the value of diversity amongst the members of the Supervisory Board and the members of the Management Board as stated in the ASMI diversity policy. Diversity is considered in any event to consist of gender, specific knowledge, work background, nationality, age and ethnic diversity, (technical) experience, and skills.

We strive to have a composition with at least 30% of the seats in the Management Board and Supervisory Board held by either gender. At the same time we aim for the best candidate taking into account the realization on the diversity criteria and match with the Supervisory Board profile.

In 2017, when searching for a new member of the Supervisory Board, special attention was given to seek for female candidates. With the appointment of Mrs. Kahle-Galonske as member of the Supervisory Board, we achieve a 20% female representation in the Supervisory Board. In 2017, the composition of the Management Board remained unchanged.

In case of open positions in the Supervisory Board or Management Board, the Supervisory Board prepares a profile based on the required educational and professional background and in the search will actively seek for candidates that support the realization of diversity on the earlier mentioned criteria.

INDEPENDENCE

The Supervisory Board is of the opinion that its current members are all independent as defined by the Dutch Corporate Governance Code. Neither the Chairman nor any other member of the Supervisory Board is a former member of ASMI's Management Board, or has another relationship with ASMI which can be judged 'not independent' of ASMI.

SUPERVISORY BOARD COMMITTEES

Audit Committee

The role of the Audit Committee is described in its charter, which is available on the Company's website (www.asm.com). The Audit Committee consists of Messrs. Kreutzer (Chairman) and Lobbezoo, and Mrs. Kahle-Galonske. During the year, the Audit Committee met with the Management Board and KPMG Accountants, the Company's independent auditors, on four occasions. Audit Committee discussions included: the Company's financial reporting including the application of accounting principles; the Company's financial position and financing programs, and tax planning; the Company's internal risk management systems; effectiveness of internal controls; the audit performed and its findings, the Annual Report and financial statements; and the budget and the quarterly progress reports prepared by the Management Board. The internal auditor participated in all four Audit Committee meetings, presenting her own actions and findings.

On several occasions, the Audit Committee met with KPMG Accountants, without the members of the Management Board present, to discuss the risk of fraud. Furthermore, the Audit Committee discussed the auditor's performance with the Management Board without KPMG Accountants present.

Nomination, Selection and Remuneration Committee

The role of the Nomination, Selection and Remuneration (NSR) Committee is described in its charter, which is available on the Company's website, www.asm.com. In general, the NSR Committee advises the Supervisory Board on matters relating to the selection and nomination of new Management Board members, as well as the remuneration of the members of the Management Board. This Committee consists of Messrs. van Pernis (Chairman), Lobbezoo and Schumacher.

In 2017, the NSR Committee held one meeting. The topics discussed included the remuneration of the individual members of the Management Board. During the meeting of the Committee, the Chief Executive Officer was present, except when his own remuneration was discussed.

The remuneration of the members of the Management Board is disclosed in Note 24 to the Consolidated financial statements of the Annual Report. The remuneration of the members of the Management Board during 2017 is fully in accordance with the remuneration policy.

WORD OF THANKS

We extend gratitude and appreciation to ASMI employees worldwide for their many contributions and enduring commitment to the Company. It is their commitment and determination that enabled us to make substantial progress in 2017. We recognize that the cumulative efforts of our workforce are truly creating real value for all of our stakeholders.

SUPERVISORY BOARD

J.C. Lobbezoo, Chairman

H.W. Kreutzer

S. Kahle-Galonske

M.C.J. van Pernis

U.H.R. Schumacher

Almere, the Netherlands

March 16, 2018

REMUNERATION REPORT

This remuneration report is based on the remuneration policy of ASM International NV (ASMI), dated May 21, 2014. The remuneration policy was adopted by the 2014 Annual General Meeting of Shareholders.

REMUNERATION POLICY MANAGEMENT BOARD

The remuneration policy was reviewed by the Supervisory Board in 2014 and is applicable to members of the Management Board of ASMI. An analysis of different scenarios was included in this review.

The objective of the remuneration policy is twofold:

- › to create a remuneration structure that will allow ASMI to attract, reward and retain qualified executives in our global competitive industry; and
- › to provide and motivate executives with a balanced and competitive remuneration that is focused on sustainable results, aligned with the long term strategy of ASMI.

The remuneration structure includes four components:

- › a fixed (base) salary component;
- › a variable component (annual performance based bonus or short-term incentive);
- › a long term component (performance based long-term incentive) in the form of stock options and performance shares; and
- › pension provisions and fringe benefits.

The remuneration peer group currently consists of the following companies:

Aalberts Industries N.V.	ASML Holding N.V.	Lam Research Corporation	Spirent Communications
Aixtron SE	BE Semiconductor N.V.	Microchip Technology Inc.	Teradyne Inc.
Amkor Technology Inc.	Freescale Semiconductor Ltd ¹⁾	ON Semiconductor Corp.	TomTom N.V.
Arcadis N.V.	KLA-Tencor Corporation	Renishaw Plc	Veeco Instruments Inc.

¹⁾ Freescale Semiconductor Ltd has been acquired by NXP Semiconductor N.V. and is therefore excluded from the peer group for future reviews.

BASE SALARY MANAGEMENT BOARD

The amounts paid as base salaries to the members of the Management Board in 2017 were as follows:

C.D. del Prado	€636,881
P.A.M. van Bommel	€415,847

ANNUAL SHORT-TERM INCENTIVE (CASH BONUS) MANAGEMENT BOARD

Each year, a short-term incentive can be earned, based on the achievement of specific challenging targets. These targets are for 75% based on company financial targets, being sales, EBIT and free cash flow, and for 25% based on non-financial targets. These non-financial targets are derived from ASMI's strategic and organizational priorities and include qualitative targets that are relevant to the responsibilities of the individual Management Board member.

The on-target bonus percentage for the CEO is 100% of base salary, with a maximum pay-out of 150% of base salary. The on-target bonus percentage for the other members of the Management Board is 75% of base salary, with a maximum pay-out of 125% of base salary.

For the year 2017 the Management Board partially met the financial targets and met the non-financial targets.

Based on the results in 2017, the following bonuses shall be paid:

C.D. del Prado	€548,646
P.A.M. van Bommel	€288,711

LONG-TERM INCENTIVE (STOCK OPTIONS/PERFORMANCE SHARES) MANAGEMENT BOARD

The long-term incentive scheme for the members of the Management Board, which was approved in the 2014 Annual General Meeting of Shareholders, consists of stock options and performance shares.

The long-term incentive scheme has the following main features:

STOCK OPTIONS

- › the options will be unconditional;
- › 100% of the options which have been granted will become exercisable after three years;
- › the options will have a term of seven years;
- › the exercise price will be equal to the average closing price on Euronext of ASMI shares during the five trading days preceding the granting of the option and including the date of granting; and
- › the number of options to be granted will be based on a fair value approach.

PERFORMANCE SHARES

- › the number of the performance shares for on target performance to be awarded will be determined by the Supervisory Board depending on the value of performance shares as part of the mix between stock options and performance shares;
- › the shares will become unconditional after three years depending on the achievement of predetermined targets;
- › the financial targets to be achieved are measured over a three year performance period. The first target is sales growth compared to market, which is measured as the average own sales growth during the measurement period compared to the average market growth during the measurement period. The second target is the average EBIT percentage, which is measured as the average EBIT over the measurement period as a percentage of the average sales;
- › the maximum number of shares that can be achieved in case of meeting stretch target is 150% of the target number of performance shares. The minimum number of shares is zero, in case none of the targets are met; and
- › the Management Board members will hold the unconditional shares for at least an additional two years, however they are allowed to sell a part of the unconditional shares after three years for tax purposes.

The mix between stock options and performance shares will be determined annually by the Supervisory Board, taking into account the objectives of the remuneration policy.

The Supervisory Board decided to grant the following value to:

C.D. del Prado:

Performance shares	€891,633
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P.A.M. van Bommel:

Performance shares	€426,243
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The grant date is April 20, 2018.

VESTING PERFORMANCE SHARES

In 2017, the first three year performance period of the performance shares granted to the members of the Management Board has been completed.

Based on the achievement of the performance criteria, the realization percentage is 117.5%. This leads to the following vesting of the performance shares awarded.

	PERFORMANCE SHARES AWARDED APRIL 24, 2015	PERFORMANCE SHARES VESTED APRIL 24, 2018
C.D. del Prado	8,544	10,039
P.A.M. van Bommel	4,450	5,229

PENSION MANAGEMENT BOARD

The pension contributions paid in 2017 were as follows:

C.D. del Prado	€110,615
P.A.M. van Bommel	€85,306

As of 2015, the members of the Management Board no longer participate in the industry wide pension fund. They are offered participation in a defined contribution plan for their salary up to €103,317 (2017). For their salary above €103,317, the members of the Management Board are compensated with an amount equal to the employer pension contribution. The members of the Management Board have the option to participate in a net pension plan offered by the company or to have the compensation paid out in cash.

The pension contributions vary from 7.2% to 28.4% of the pensionable salary depending on age. The members of the Management Board contribute 4.6% of the pensionable salary and ASMI pays the remaining part.

There are no arrangements regarding early retirement.

OTHER ARRANGEMENTS MANAGEMENT BOARD

A number of other arrangements are offered to members of the Management Board, such as expense and representation allowance, disability insurance, accident insurance and a car allowance/company car.

ASMI's policy does not allow personal loans to members of the Management Board.

CONTRACTS OF EMPLOYMENT MANAGEMENT BOARD

All members of the Management Board have a written contract of employment with ASMI or one of its related subsidiaries. The members of the Management Board have been appointed to the Management Board for a four year period:

- » C.D. del Prado, started May 18, 2006; in May 2014 Mr. del Prado was reappointed for a new term of 4 years; and
- » P.A.M. van Bommel, started July 1, 2010; in May 2014 Mr. van Bommel was reappointed for a new term of 4 years.

For future new appointments to the Management Board, the term of the appointment will also be set at four years.

As is mentioned in the employment agreements of the members of the Management Board, in case of termination of the employment on behalf of the company, the members of the Management Board are eligible for a severance payment of maximum one year base salary.

PAY RATIO

The ratio of the CEO remuneration and the average remuneration of all other employees (the pay ratio) is calculated by dividing the remuneration of the CEO by the average remuneration of all employees. The remuneration of the CEO is the total of base salary, bonus and share based payments, as published in Note 24 to the Consolidated financial statement of this report. The average remuneration of all employees is calculated by dividing the total personnel costs (wage and salaries and share based payments) as published in Note 21 to the Consolidated financial statement minus the remuneration of the Management Board, by the total number of employees.

The 2017 CEO pay ratio is 25.

REMUNERATION SUPERVISORY BOARD

The remuneration of the members of the Supervisory Board is not dependent on our financial results. No member of the Supervisory Board personally maintains a business relationship with ASMI other than as a member of the Supervisory Board. The Nomination, Selection and Remuneration (NSR) Committee is responsible for reviewing and, if appropriate, recommending changes to the remuneration of the Supervisory Board. Any recommended changes to the remuneration of the members of the Supervisory Board must be submitted to the Annual General Meeting of Shareholders (AGM) for approval.

The remuneration of the Supervisory Board was approved by the shareholders in the 2011 AGM. The Supervisory Board's annual remuneration has been fixed as follows:

(Amount in euros)

BASE REMUNERATION:

Chairman of the Supervisory Board	60,000
Member of the Supervisory Board (other than the Chairman)	45,000

ADDITIONAL REMUNERATION:

Chairman of the Audit Committee	7,500
Member of the Audit Committee (other than the Chairman)	5,000
Chairman of the Nomination, Selection and Remuneration Committee	7,500
Member of the Nomination, Selection and Remuneration Committee (other than the Chairman)	5,000

EXTERNAL AUDITOR

In accordance with Dutch law, ASMI's external auditor is appointed by the Annual General Meeting of Shareholders and is nominated for appointment by the Supervisory Board upon advice from the Audit Committee and the Management Board. Our current external auditor, KPMG, was reappointed as external auditor by the 2017 Annual General Meeting of Shareholders (AGM) for the reporting year 2017.

The external auditor is present at our AGM to respond to questions, if any, from the shareholders about the auditor's report on the financial statements.

The Audit Committee has determined that the provision of services by KPMG and its member firms is compatible with maintaining KPMG's independence. All audit and permitted non-audit services provided by KPMG and its member firms during 2017 were pre-approved by the Audit Committee.

AUDIT COMMITTEE POLICIES AND PROCEDURES

The Audit Committee has adopted the following policies and procedures for pre-approval of all audit and permitted non-audit services provided by our external auditor:

AUDIT SERVICES

Management submits to the Audit Committee for pre-approval the scope and estimated fees for specific services directly related to performing the independent audit of our statutory and consolidated financial statements for the current year.

AUDIT-RELATED SERVICES

The Audit Committee may pre-approve expenditures up to a specified amount for services included in identified service categories that are related extensions of audit services and are logically performed by the auditors. Additional services exceeding the specified pre-approved limits require specific Audit Committee approval.

TAX SERVICES

The Audit Committee may pre-approve expenditures up to a specified amount per engagement and in total for identified services related to tax matters. Additional services exceeding the specified pre-approved limits, or involving service types not included in the pre-approved list, require specific Audit Committee approval.

OTHER SERVICES

In the case of specified services for which utilizing our external auditor creates efficiencies, minimizes disruption or preserves confidentiality, or for which management has determined that our external auditor possesses unique or superior qualifications to provide such services, the Audit Committee may pre-approve expenditures up to a specified amount per engagement and in total. Additional services exceeding the specified pre-approved limits, or involving service types not included in the pre-approved list, require specific Audit Committee approval.

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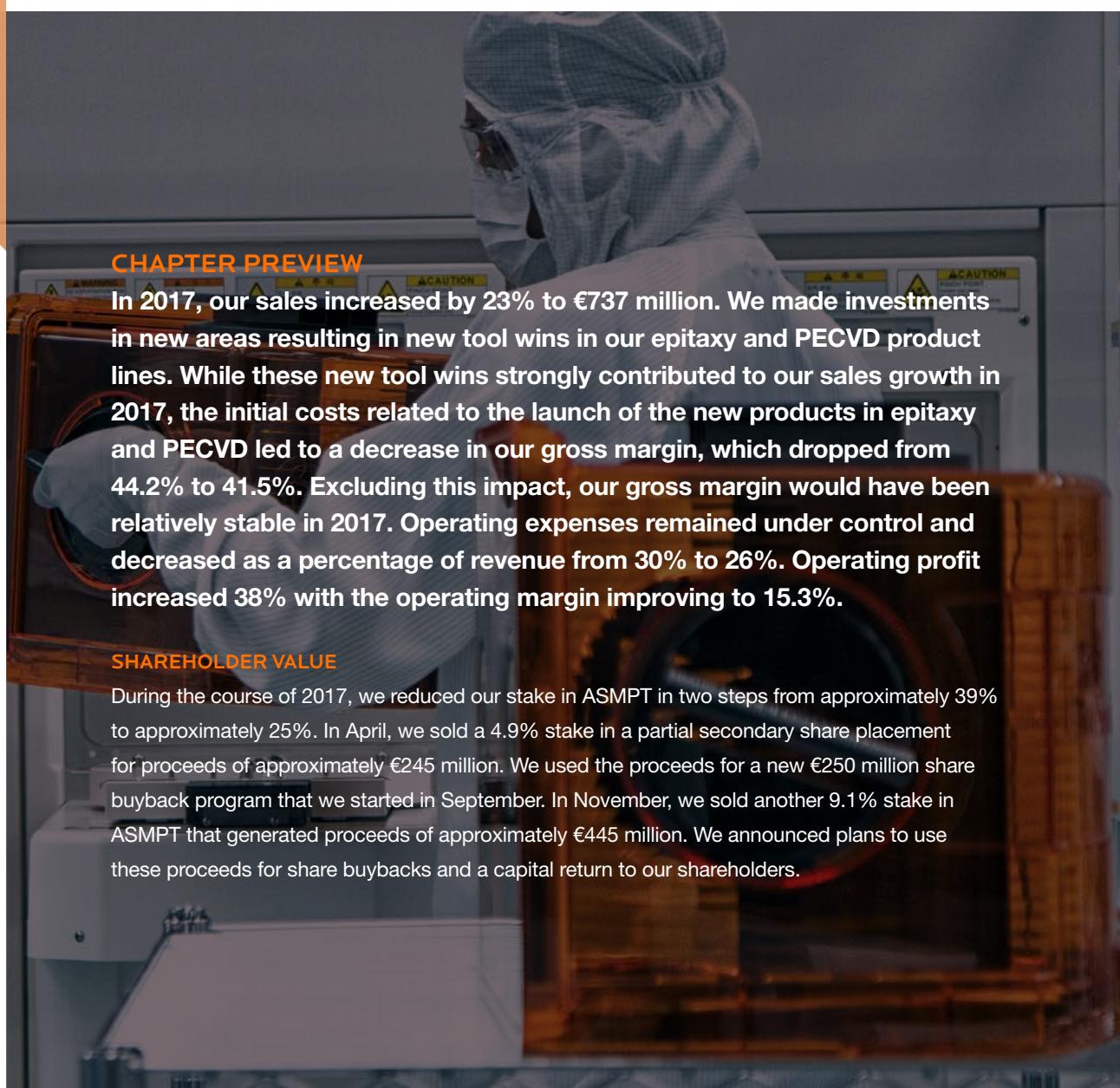
INDEPENDENT AUDITOR'S REPORT

CHAPTER PREVIEW

In 2017, our sales increased by 23% to €737 million. We made investments in new areas resulting in new tool wins in our epitaxy and PECVD product lines. While these new tool wins strongly contributed to our sales growth in 2017, the initial costs related to the launch of the new products in epitaxy and PECVD led to a decrease in our gross margin, which dropped from 44.2% to 41.5%. Excluding this impact, our gross margin would have been relatively stable in 2017. Operating expenses remained under control and decreased as a percentage of revenue from 30% to 26%. Operating profit increased 38% with the operating margin improving to 15.3%.

SHAREHOLDER VALUE

During the course of 2017, we reduced our stake in ASMPT in two steps from approximately 39% to approximately 25%. In April, we sold a 4.9% stake in a partial secondary share placement for proceeds of approximately €245 million. We used the proceeds for a new €250 million share buyback program that we started in September. In November, we sold another 9.1% stake in ASMPT that generated proceeds of approximately €445 million. We announced plans to use these proceeds for share buybacks and a capital return to our shareholders.



CONSOLIDATED STATEMENT OF PROFIT OR LOSS

(EUR thousand, except per share data)		YEAR ENDED DECEMBER 31,	
	NOTES	2016	2017
Net sales	19	597,930	737,401
Cost of sales		(333,430)	(431,506)
GROSS PROFIT	19	264,500	305,895
Operating expenses:			
Selling, general and administrative	21	(91,130)	(99,931)
Research and development	22	(91,129)	(92,777)
TOTAL OPERATING EXPENSES		(182,259)	(192,708)
RESULT FROM OPERATIONS	19	82,241	113,187
Finance income		3,095	1,683
Finance expense		(1,096)	(1,799)
Foreign currency exchange gain (loss), net		13,032	(30,546)
Share in income of investments in associates	6	40,488	89,614
Result from sale of ASMPT shares	6	–	284,898
RESULT BEFORE INCOME TAXES		137,760	457,037
Income taxes	20	(2,289)	(4,635)
NET EARNINGS FROM OPERATIONS, ATTRIBUTABLE TO COMMON SHAREHOLDERS		135,471	452,402
Per share data	23		
Basic net earnings per share (EUR):			
FROM OPERATIONS		2.23	7.72
Diluted net earnings per share (EUR):			
FROM OPERATIONS		2.21	7.63
Weighted average number of shares (thousand):			
Basic		60,616	58,573
Diluted		61,253	59,325

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	NOTES	YEAR ENDED DECEMBER 31,	
		2016	2017
(EUR thousand)			
NET EARNINGS FROM OPERATIONS, ATTRIBUTABLE TO COMMON SHAREHOLDERS		135,471	452,402
Other comprehensive income, net of income tax			
Items that will not be reclassified subsequently to profit or loss:			
Remeasurement of defined benefit obligation		–	(261)
Share of other comprehensive income (loss) investments in associates	6	(1,344)	(2,580)
		(1,344)	(2,841)
Items that may be subsequently reclassified to profit or loss:			
Foreign currency translation effect		40,069	(172,893)
		40,069	(172,893)
OTHER COMPREHENSIVE INCOME FOR THE YEAR, NET OF INCOME TAX		38,725	(175,734)
TOTAL COMPREHENSIVE INCOME, ATTRIBUTABLE TO COMMON SHAREHOLDERS	11	174,196	276,668

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(EUR thousand)	NOTES	DECEMBER 31,	
		2016	2017
Assets			
Property, plant and equipment	3	95,004	106,632
Goodwill	4	11,270	11,270
Other intangible assets	5	100,179	113,295
Investments in associates	6	1,218,024	730,552
Deferred tax assets	20	13,919	18,116
Other non-current assets		4,824	4,845
Evaluation tools at customers	7	36,594	29,710
TOTAL NON-CURRENT ASSETS		1,479,814	1,014,420
Inventories	8	112,339	142,849
Accounts receivable	9	137,020	163,135
Income taxes receivable	20	370	1,272
Other current assets	28	22,849	19,065
Cash and cash equivalents	10	378,157	836,461
TOTAL CURRENT ASSETS		650,735	1,162,782
TOTAL ASSETS		2,130,549	2,177,202
Equity and liabilities			
EQUITY	11	1,998,142	2,011,512
Pension liabilities	12	1,418	386
Deferred tax liabilities	20	13,118	13,864
TOTAL NON-CURRENT LIABILITIES		14,536	14,250
Accounts payable		60,910	79,349
Provision for warranty	13	5,800	6,562
Income taxes payable	20	2,467	6,575
Accrued expenses and other payables	14	48,694	58,954
TOTAL CURRENT LIABILITIES		117,871	151,440
TOTAL LIABILITIES		132,407	165,690
TOTAL EQUITY AND LIABILITIES		2,130,549	2,177,202

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

(EUR thousand except for share data)	NOTES	NUMBER OF COMMON SHARES OUTSTANDING	COMMON SHARES	CAPITAL IN EXCESS OF PAR VALUE	TREASURY SHARES AT COST	RETAINED EARNINGS	OTHER RESERVES ¹⁾	TOTAL EQUITY
BALANCE AS OF JANUARY 1, 2016		61,706,387	2,552	221,868	(84,000)	1,606,666	190,763	1,937,849
Net earnings		—	—	—	—	135,471	—	135,471
Other comprehensive income	11	—	—	—	—	—	38,725	38,725
TOTAL COMPREHENSIVE INCOME (LOSS)		—	—	—	—	135,471	38,725	174,196
Dividend paid to common shareholders		—	—	—	—	(42,673)	—	(42,673)
Compensation expense share-based payments	12	—	—	8,387	—	—	—	8,387
Exercise stock options out of treasury shares		720,572	—	(2,591)	27,836	(10,536)	—	14,709
Vesting restricted shares out of treasury shares	12	55,041	—	(1,827)	1,827	—	—	—
Purchase of common shares	11	(2,666,157)	—	—	(97,140)	—	—	(97,140)
Other movements in investments in associates:								
Dilution	6	—	—	—	—	2,814	—	2,814
BALANCE AS OF DECEMBER 31, 2016		59,815,843	2,552	225,837	(151,477)	1,691,742	229,488	1,998,142
Net earnings		—	—	—	—	452,402	—	452,402
Other comprehensive income	11	—	—	—	—	—	(175,734)	(175,734)
TOTAL COMPREHENSIVE INCOME (LOSS)		—	—	—	—	452,402	(175,734)	276,668
Dividend paid to common shareholders		—	—	—	—	(41,470)	—	(41,470)
Compensation expense share-based payments	12	—	—	7,801	—	—	—	7,801
Exercise stock options out of treasury shares	12	626,939	—	(10,612)	23,904	—	—	13,292
Vesting restricted shares out of treasury shares	12	118,317	—	(4,501)	4,501	—	—	—
Purchase of common shares	11	(4,420,946)	—	—	(243,527)	—	—	(243,527)
Cancellation of common shares out of treasury shares	11	—	(60)	—	61,945	(61,885)	—	—
Other movements in investments in associates:								
Dilution	6	—	—	—	—	606	—	606
BALANCE AS OF DECEMBER 31, 2017		56,140,153	2,492	218,525	(304,654)	2,041,395	53,754	2,011,512

¹⁾ Other reserves consist of the currency translation reserve, remeasurement on net defined benefit and the reserve for proportionate share in other comprehensive income investments in associates. See Note 11.

CONSOLIDATED STATEMENT OF CASH FLOWS

(EUR thousand)		YEAR ENDED DECEMBER 31,	
	NOTES	2016	2017
Cash flows from operating activities			
Net earnings from operations		135,471	452,402
Adjustments to reconcile net earnings to net cash from operating activities			
Depreciation, amortization and impairments	3,5,7	51,690	52,097
Share-based compensation	12	8,387	7,801
Non-cash financing costs		(2,483)	29,609
Share in income of investments in associates	6	(40,488)	(89,614)
Gain on sale of ASMPT shares	6	–	(284,898)
Income tax		2,289	4,635
Changes in assets and liabilities			
Accounts receivable		(43,352)	(37,930)
Inventories		(9,510)	(45,161)
Other current assets		(10,212)	2,540
Accounts payable and accrued expenses		7,045	28,449
Income tax paid		(7,425)	(3,870)
NET CASH FROM OPERATING ACTIVITIES		91,412	116,060
Cash flows from investing activities			
Capital expenditures	3	(26,890)	(44,171)
Proceeds from sale of property, plant and equipment	3	1,147	823
Capitalized development expenditure	5	(27,327)	(38,615)
Purchase of intangible assets	5	(7,024)	(2,393)
Dividend received from associates	6	22,083	36,458
Proceeds from sale of ASMPT shares	6	–	690,660
NET CASH FROM INVESTING ACTIVITIES		(38,011)	642,762
Cash flows from financing activities			
Debt issuance fees paid		(810)	(132)
Purchase of treasury shares ASMI	11	(97,024)	(239,555)
Proceeds from issuance of treasury shares	12	14,709	13,292
Dividends to common shareholders of ASMI		(42,673)	(41,470)
NET CASH USED IN FINANCING ACTIVITIES		(125,798)	(267,865)
FOREIGN CURRENCY TRANSLATION EFFECT ON CASH AND CASH EQUIVALENTS		3,639	(32,653)
NET INCREASE / (DECREASE) IN CASH AND CASH EQUIVALENTS		(68,758)	458,304
Cash and cash equivalents at beginning of year	10	446,915	378,157
CASH AND CASH EQUIVALENTS AT END OF YEAR	10	378,157	836,461

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1. GENERAL INFORMATION/SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

GENERAL INFORMATION

ASM International NV (ASMI, or the Company) is a Dutch public liability company domiciled in the Netherlands with its principal operations in Europe, the United States of America, and Asia. The Company dedicates its resources to the research, development, manufacturing, marketing and servicing of equipment and materials used to produce mainly semiconductor devices. The Company is registered at Versterkerstraat 8, 1322 AP Almere, the Netherlands.

The Company's shares are listed for trading on the Euronext Amsterdam Stock Exchange (symbol ASMI).

The accompanying Consolidated financial statements include the financial statements of ASM International NV, and its consolidated subsidiaries (together referred to as ASMI, or the Company). ASMI's subsidiaries are listed in Note 2 and associates are listed in Note 6.

BASIS FOR ACCOUNTING

The consolidated financial statements for the year ended December 31, 2017 have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union and also comply with the financial reporting requirements included in Section 362(9) of Part 9, Book 2 of the Dutch Civil Code.

The financial statements have been prepared by the Management Board of the Company and authorized for issue on March 16, 2018 and will be submitted for adoption to the Annual General Meeting of Shareholders (AGM) on May 28, 2018.

The financial statements will be filed at the Trade Register of the Chamber of Commerce in Almere, the Netherlands within eight days of adoption by the 2018 AGM.

FUNCTIONAL AND PRESENTATION CURRENCY

The accompanying Consolidated financial statements are presented in Euro (EUR), which is the Company's functional currency. All amounts have been rounded to the nearest thousand, unless otherwise indicated.

BASIS OF PREPARATION

The Consolidated financial statements have been prepared under the historical cost convention, unless otherwise indicated. The Company applies the going concern basis in preparing its financial statements.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

A number of the Company's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique.

The Company has an established approach with respect to the measurement of fair values. If third-party information, such as broker quotes or pricing services, is used to measure fair values, the Company assesses and documents the evidence obtained from the third parties to support the conclusion that such valuations meet the requirements of IFRS, including the level in the fair value hierarchy in which such valuations should be classified.

Fair values are categorized into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

If the inputs used to measure the fair value of an asset or a liability fall into different levels of the fair value hierarchy, then the fair value measurement is categorized in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

Further information about the assumptions made in measuring fair values is included in the following Notes:

- › Note 12 – Employee benefits; and
- › Note 16 – Financial instruments and financial risk management.

USE OF ESTIMATES AND JUDGMENTS

In preparing these Consolidated financial statements, management has made judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to estimates are recognised prospectively.

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the year ended December 31, 2017 is included in the following Notes:

- › Notes 3, 4, 5, 6 and 7 – Valuation of non-financial assets; and
- › Note 20 – Valuation of deferred tax assets.

CRITICAL ACCOUNTING POLICIES

A critical accounting policy is defined as one that is both material to the presentation of ASMI's Consolidated financial statements and that requires management to make difficult, subjective or complex judgments that could have a material effect on ASMI's financial condition or results of operations. Specifically, these policies have the following attributes: (1) ASMI is required to make assumptions about matters that are highly uncertain at the time of the estimate; and (2) different estimates ASMI could reasonably have used, or changes in the estimate that are reasonably likely to occur, could have a material effect on ASMI's financial condition or results of operations.

Estimates and assumptions about future events and their effects cannot be determined with certainty. ASMI bases its estimates on historical experience and on various other assumptions believed to be applicable and reasonable under the circumstances. These estimates may change

as new events occur, as additional information is obtained, and as ASMI's operating environment changes. These changes have historically been minor and have been included in the consolidated financial statements as soon as they became known. In addition, management is periodically faced with uncertainties, the outcomes of which are not within its control and will not be known for prolonged periods of time. Based on a critical assessment of its accounting policies and the underlying judgments and uncertainties affecting the application of those policies, management believes that ASMI's Consolidated financial statements are fairly stated in accordance with IFRS, and provide a meaningful presentation of ASMI's financial condition and results of operations. An analysis of specific sensitivity to changes of estimates and assumptions is included in the Notes to the financial statement.

Management believes that the following accounting policies are critical:

- › revenue recognition;
- › inventories;
- › evaluation of long-lived assets for impairment;
- › evaluation of investments in associates for impairment;
- › intangible assets; and
- › income taxes.

CHANGES IN ACCOUNTING POLICIES

The Company adopted new and/or revised standards and interpretations that came into effect from January 1, 2017. The initial application of those standards and interpretations does not have any material impact on the Consolidated financial statements.

SIGNIFICANT ACCOUNTING POLICIES

The Company has consistently applied the following accounting policies to all periods presented in these Consolidated financial statements.

Consolidation

The Consolidated financial statements include the accounts of ASMI and all of its subsidiaries where ASMI holds a controlling interest. Non-controlling interest is disclosed separately, where appropriate, in the Consolidated financial statements.

Control is achieved when ASMI has:

- › the power over an investee;
- › exposure, or rights, to variable returns from its involvement with the investee; and
- › the ability to use its power over the investee to affect the amount of the investor's returns.

ASMI reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above.

As from the date these criteria are met, financial data of the relevant subsidiary are included in the consolidation and deconsolidated from the date on which ASMI's control ceases.

Loss of control

Upon loss of control, ASMI derecognizes the assets and liabilities of the subsidiary. Any surplus or deficit arising on the loss of control is recognized in profit or loss. If ASMI retains any interest in this subsidiary, then such interest is measured at fair value at the date on which control is lost. Subsequently, it is accounted for as an equity-accounted investee or as an available-for-sale financial asset, depending on the level of influence retained.

Subsidiaries

Subsidiaries are entities controlled by the Company. The financial statements of subsidiaries are included in the Consolidated financial statements from the date on which control commences until the date on which control ceases.

Interests in equity-accounted investees

The Company's interests in equity-accounted investees comprise investments in associates.

Associates are those entities in which the Company has significant influence, but not control or joint control, over the financial and operating policies.

Interests in associates are accounted for using the equity method. They are initially recognized at cost, which includes transaction costs. Upon acquisition of the investment in an associate, any excess of the cost of the investment over the Company's share of the net fair value of the identifiable assets and liabilities of the investee is recognized as goodwill, which is included in the carrying amount of the investment.

Subsequent to initial recognition, the consolidated financial statements include the Company's share of the profit or loss and other comprehensive income (OCI) of equity-accounted investees, until the date on which significant influence ceases.

Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealized income and expenses arising from intra-group transactions, are eliminated. Unrealized gains arising from transactions with equity-accounted

investees are eliminated against the investment to the extent of the Company's interest in the investee. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

Foreign currency translation

The individual financial statements of each group entity are presented in their local functional currency. For the purpose of the Consolidated financial statements, the results and financial position of each entity is expressed in euros, which is ASMI's functional currency and the presentation currency for the Consolidated financial statements.

Foreign currency transactions

In preparing the financial statements of the individual entities, transactions in foreign currencies are recorded at the exchange rates on the date of the transactions. At each balance sheet date, monetary items denominated in foreign currencies are translated at the rates prevailing on the balance sheet date. Non-monetary items carried at fair value that are denominated in foreign currencies are translated at the rates prevailing on the date when the fair value was determined.

Exchange rate differences arising on the settlement of monetary items, and on the translation of monetary items, are recognized in the Consolidated Statement of Profit or Loss in the period in which they arise. Exchange rate differences arising on the translation of non-monetary items carried at fair value are recognized in the Consolidated Statement of Profit or Loss for the period except for differences arising on the translation of non-monetary items in respect of which gains and losses are recognized directly in equity.

Foreign operations

For the purpose of presenting Consolidated financial statements, assets and liabilities of foreign operations are translated into euro at the exchange rates at the reporting date. The income and expenses of foreign operations are translated into euro at the exchange rates at the dates of the transactions.

Foreign currency differences are recognized in OCI and accumulated in the translation reserve, except to the extent that the translation difference is allocated to non-controlling interest.

When a foreign operation is disposed of in its entirety or partially such that control or significant influence is lost, the cumulative amount in the translation reserve related to that foreign operation is reclassified to profit or loss as part of the gain or loss on disposal. If the Company disposes of part of its interest in a subsidiary but retains control, then the relevant proportion of the cumulative amount

is reattributed to non-controlling interest. When the Company disposes of only part of an associate while retaining significant influence, the relevant proportion of the cumulative amount is reclassified to profit or loss.

Segment reporting

The Back-end segment is still reported as a separate segment after the Company ceased control on March 15, 2013, since the full results of the Back-end segment are continued to be reviewed by our Chief Operating Decision Maker (CODM).

The Company organizes its activities in two operating segments, Front-end and Back-end. Operating segments are reported in a manner consistent with the internal reporting provided to the Chief Executive Officer (CEO), which is the CODM. Operating segments are in line with the reporting segments.

Accordingly, the asset and profit or loss information regarding the operations that comprise the segment are disclosed. The full financial results are reviewed by the CODM, the external reporting of the segment is on an equity method investment basis. The total of all segments' financial amounts are reconciled to the corresponding amounts reported in the Consolidated financial statements, eliminations are reflected in the reconciling column for amounts reported in excess of those amounts reflected in the Consolidated financial statements.

The Front-end segment manufactures and sells equipment used in wafer processing, encompassing the fabrication steps in which silicon wafers are layered with semiconductor devices. The segment is a product driven organizational unit comprised of manufacturing, service, and sales operations in Europe, the United States, Japan, South Korea and Southeast Asia.

The Back-end segment manufactures and sells equipment and materials used in assembly and packaging, encompassing the processes in which silicon wafers are separated into individual circuits and subsequently assembled, packaged and tested. The segment is organized in ASM Pacific Technology Ltd, in which the Company holds a 25.18% interest, whilst the remaining shares are listed on the Stock Exchange of Hong Kong.

Property, plant and equipment

Items of property, plant and equipment are measured at cost, which includes capitalized borrowing costs, less accumulated depreciation and any accumulated impairment losses.

If significant parts of an item of property, plant and equipment have different useful lives, then they are accounted for as separate items (major components) of property, plant and equipment.

Depreciation is calculated to write off the cost of items of property, plant and equipment less their estimated residual values using the straight-line method over their estimated useful lives, and is generally recognized in profit or loss. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

The estimated useful lives of property, plant and equipment for current and comparative periods are as follows:

Land, building and leasehold improvements	0-25 years
Machinery equipment	2-10 years
Furniture and fixtures and other equipment	2-10 years

An item of property, plant and equipment is recognized upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss on disposal of an item of property, plant and equipment is recognized in profit or loss.

Intangible assets

Goodwill

The Company accounts for business combinations using the acquisition method when control is transferred to the Company. The consideration transferred in the acquisition is generally measured at fair value, as are the identifiable net assets acquired. Any goodwill that arises is tested annually for impairment. Transaction costs are expensed as incurred.

Goodwill represents the excess of the costs of an acquisition over the fair value of the amounts assigned to assets acquired and liabilities incurred or assumed of the acquired subsidiary at the date of acquisition. Goodwill on acquisition of subsidiaries is allocated to cash generating units (CGUs) for the purpose of impairment testing. The allocation is made to those CGUs that are expected to benefit from the business combination in which the goodwill arose. Goodwill is tested for impairment annually and whenever events or changes in circumstances indicate that the carrying amount of the goodwill may not be recoverable. If the recoverable amount of the CGU is less than the carrying amount of the unit, the impairment loss is recognized. An impairment loss recognized for goodwill is not reversed in a subsequent period. Goodwill is stated at cost less accumulated impairment losses.

The Company's policy for goodwill arising on the acquisition of an associate is described in Note 6 'Investments in Associates'.

Other intangible assets

Other intangible assets include capitalized development expenses, software, purchased technology and remaining other intangible assets. Other intangible assets that are acquired by the Company with finite useful lives are measured at cost less accumulated amortization and any accumulated impairment losses.

Expenditure on research activities is recognized in profit or loss as incurred.

In determining the capitalization of development expenses, the Company makes estimates and assumptions based on expected future economic benefits generated by products that are the result of these development expenses. Other important estimates and assumptions are the required internal rate of return, the distinction between research, development and high-volume manufacturing and the estimated useful life.

Development expenses are capitalized when all of the following criteria are demonstrated:

- › the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- › its intention to complete the intangible asset and use or sell it;
- › its ability to use or sell the intangible asset;
- › how the intangible asset will generate probable future economic benefits;
- › the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- › its ability to reliably measure the expenditure attributable to the intangible asset during its development.

The Company capitalizes development expenses that meet the above-mentioned criteria in its Consolidated financial statements. Subsequent to initial recognition, internally-generated intangible assets are reported at cost less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

Amortization of capitalized development expenses is calculated using the straight-line method over the estimated useful lives of the developed product. Amortization starts when the developed product is transferred to high-volume manufacturing.

Amortization method, useful life and residual value are reviewed at each reporting date and adjusted if appropriate.

The estimated useful lives of other intangible assets for current and comparative periods are as follows:

Development cost	5 years
Software	3 years
Purchased technology and other intangible assets	5-7 years

Investments in associates

Investments in associates are investments in entities in which ASMI can exert significant influence but which ASMI does not control, generally having between 20% and 50% of the voting rights. These entities are accounted for using the equity method and are initially recognized at cost. Dividend income from the Company's associated companies is recognized when the right to receive payment is established. Their carrying value includes goodwill identified upon acquisition, net of any accumulated impairment.

When ASMI's share of losses in an associate equals or exceeds its interest in the associate, including any other receivables for which settlement is neither planned nor likely to occur in the foreseeable future, ASMI does not recognize further losses, unless ASMI has obligations to or made payments on behalf of the associate.

At each reporting date, the Company determines if there is any objective evidence that the associate is impaired. An impairment, being the difference between the recoverable amount of the associate and its carrying value, is recognized in the Consolidated statement of profit or loss.

ASMI does not separately test associates' underlying assets for impairment. However, ASMI recognizes its share of any impairment charge recorded by an investee and considers the effect, if any, of the impairment on the basis difference in the assets giving rise to the investee's impairment charge. A loss in value of an investment which is significant or prolonged will be recognized. Significant is defined as at least 20% over an uninterrupted period of nine months, or more than 40% on the reporting date. Prolonged is defined as measured below cost for more than a year.

Equity method investments are tested for prolonged decline in value. If the fair value of an investment is less than its carrying value, the Company determines whether the decline in value is temporary or prolonged. A prolonged decline in value is measured as of a balance sheet date. If after a prior

recognized impairment the fair value is more than its carrying value, this impairment is reversed. The determination of whether an investment is impaired is made at the individual security level in each reporting period.

Evaluation tools at customers

Evaluation tools at customers are systems generally delivered to customers under evaluation and include substantial customization by our engineers and R&D staff in the field. Evaluation tools are recorded at cost and depreciated using the straight-line method over their estimated useful life of five years, or their shorter economic life. The depreciation expenses are reported as cost of sales.

On final acceptance from the customer, the purchase consideration is recognized as revenue and the carrying value of the evaluation system is recognized as cost of sales. In the circumstance that the system is returned, at the end of the evaluation period, a detailed impairment review takes place, and future sales opportunities and additional costs are identified. It is only when the fair value is below the carrying value of the evaluation tool that an additional depreciation is recognized. The remaining carrying value is recognized as finished goods (inventory).

Inventories

Inventories are stated at the lower of cost or net realizable value. Costs include net prices paid for materials purchased, charges for freight and custom duties, production labor costs and factory overhead. Allowances are made for slow-moving, obsolete or unsellable inventory.

Allowances for obsolescence of inventory are determined based on the expected demand as well as the expected market value of the inventory. We regularly evaluate the value of our inventory of components and raw materials, work in progress and finished goods, based on a combination of factors including the following: forecasted sales, historical usage, product end of life cycle, estimated current and future market values, service inventory requirements and new product introductions, as well as other factors. Purchasing requirements and alternative uses for the inventory are explored within these processes to mitigate inventory exposure. We record write-downs for inventory based on the above factors and take into account worldwide quantities and demand into our analysis.

Financial instruments

The Company classifies non-derivative financial assets into loans and receivables. The Company classifies non-derivative financial liabilities into other financial liabilities.

Non-derivative financial assets and financial liabilities – Recognition and derecognition

The Company initially recognizes receivables on the date when they are originated. Receivables comprise account (trade) and other receivables and cash and cash equivalents. Receivables are measured at amortized cost using the effective interest method, less any impairment. Financial assets and financial liabilities are initially recognized on the trade date when the entity becomes a party to the contractual provisions of the instrument.

The Company derecognizes a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred, or it neither transfers nor retains substantially all of the risks and rewards of ownership and does not retain control over the transferred asset. Any interest in such derecognizes a financial asset that is created or retained by the Company is recognized as a separate asset or liability.

The Company derecognizes a financial liability when its contractual obligations are discharged or cancelled, or expired.

Financial assets and financial liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Company currently has a legally enforceable right to offset the amounts and intends either to settle them on a net basis or to realize the asset and settle the liability simultaneously.

Non-derivative financial assets – Measurement

Loans and receivables are initially measured at fair value plus any directly attributable transaction costs. Subsequent to initial recognition, they are measured at amortized cost using the effective interest method.

Account receivable

A significant percentage of our accounts receivable is derived from sales to a limited number of large multinational semiconductor device manufacturers located throughout the world. In order to monitor potential credit losses, we perform ongoing credit evaluations of our customers' financial condition. An allowance for doubtful accounts is maintained for potential credit losses based upon management's assessment of the expected collectability of all accounts receivable. The allowance for doubtful accounts is reviewed periodically to assess the adequacy of the allowance. In making this assessment, management takes into consideration any circumstances of which we are aware

regarding a customer's inability to meet its financial obligations; and our judgments as to potential prevailing economic conditions in the industry and their potential impact on the Company's customers.

The allowance is based on historical experience, credit evaluations, specific customer collection history and any customer-specific issues ASMI has identified. Changes in circumstances, such as an unexpected adverse material change in a major customer's ability to meet its financial obligation to ASMI or its payment trends, may require us to further adjust our estimates of the recoverability of amounts due to ASMI, which could have an adverse material effect on ASMI's financial condition and results of operations.

Cash and cash equivalents

Cash and cash equivalents consist of deposits held at call with banks, investments in money market funds that invest in debt securities of financial institutions and other short-term highly liquid investments with original maturity of three months or less. Bank overdrafts are included in notes payable to banks in current liabilities.

Non-derivative financial liabilities – Measurement

Other non-derivative financial liabilities are initially measured at fair value less any directly attributable transaction costs. Subsequent to initial recognition, these liabilities are measured at amortized cost using the effective interest method.

Share capital

Ordinary shares

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of ordinary shares are recognized as a deduction from equity, net of any tax effects.

Preference share capital

Preference share capital is classified as equity if it is non-redeemable, or redeemable only at the Company's option, and any dividends are discretionary. Discretionary dividends thereon are recognized as distributions within equity upon approval by the Company's shareholders.

Preference share capital is classified as a financial liability if it is redeemable on a specific date or at the option of the shareholders, or if dividend payments are not discretionary. Non-discretionary dividends thereon are recognized as interest expense in profit or loss as accrued.

Repurchase and reissue of ordinary shares (treasury shares)

When shares recognized as equity are repurchased, the amount of the consideration paid, which includes directly attributable costs, is recognized as a deduction from equity. Repurchased shares are classified as treasury shares and are presented in the treasury share reserve. When treasury shares are sold or reissued subsequently, the amount received is recognized as an increase in equity and the resulting surplus or deficit on the transaction is presented in a non-distributable capital reserve.

Issuance of shares by an equity accounted investee

The associate ASMPT yearly issues common shares pursuant to their employee share incentive scheme. The effect of these issuances is a dilution of the Company's ownership in ASMPT. The Company recognizes the impact of these issuances directly into equity.

Comprehensive income

Comprehensive income consists of net earnings (loss) and other comprehensive income. Other comprehensive income includes gains and losses that are not included in net earnings, but are recorded directly in equity.

Provisions

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognized as finance cost.

Impairment

Non-derivative financial assets

Financial assets not classified as at fair value through profit or loss, including an interest in an equity-accounted investee, are assessed at each reporting date to determine whether there is objective evidence of impairment.

Objective evidence that financial assets are impaired includes, default or delinquency by a debtor, restructuring of an amount due to the Company on terms that the Company would not consider otherwise, indications that a debtor or issuer will enter bankruptcy, adverse changes in the payment status of borrowers or issuers, the disappearance of an active market for a security because

of financial difficulties, or observable data indicating that there is a measurable decrease in the expected cash flows from a group of financial assets.

Loans and receivables

The Company considers evidence of impairment for these assets at both an individual asset and a collective level. All individually significant assets are individually assessed for impairment. Those found not to be impaired are then collectively assessed for any impairment that has been incurred but not yet individually identified.

The impairment method for account receivables is described at Note 9 Accounts Receivable.

Equity-accounted investees

An impairment loss in respect of an equity-accounted investee is measured by comparing the recoverable amount of the investment with its carrying amount. An impairment loss is recognized in profit or loss, and is reversed if there has been a favorable change in the estimates used to determine the recoverable amount.

Non-financial assets

At each reporting date, the Company reviews the carrying amounts of its non-financial assets (other than biological assets, investment property, inventories and deferred tax assets) to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. Goodwill is tested annually for impairment.

For impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or CGUs. Goodwill arising from a business combination is allocated to CGUs or groups of CGUs that are expected to benefit from the synergies of the combination.

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. Value in use is based on the estimated future cash flows, discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU.

An impairment loss is recognized if the carrying amount of an asset or CGU exceeds its recoverable amount.

Impairment losses are recognized in profit or loss. They are allocated first to reduce the carrying amount of any goodwill allocated to the CGU, and then to reduce the carrying amounts of the other assets in the CGU on a pro rata basis.

An impairment loss in respect of goodwill is not reversed. For other assets, an impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

Commitments and contingencies

The Company has various contractual obligations such as operating lease commitments, purchase commitments and commitments for capital expenditure. These obligations are generally not recognized as liabilities on the Company's statement of financial position but are disclosed in the Notes to the financial statements.

Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances.

The Company's revenue includes revenue from contractual arrangements consisting of multiple deliverables, such as equipment and installation. The revenue for the total transaction is first allocated to its components, based on their relative selling prices. Then the revenue allocated to the undelivered component is deferred. The revenue from the undelivered element of the arrangement is deferred at the relative selling price until delivery of the element.

The Company's sales frequently involve complex equipment, which may include customer-specific criteria, sales to new customers or equipment with new technology. For each sale, the decision whether to recognize revenue is, in addition to shipment and factory acceptance, based on the contractual agreement with a customer, the experience with a particular customer, the technology and the number of similarly configured equipment previously delivered. Instead of recognizing revenue, the Company could decide to defer revenue recognition until completion of installation at the customer's site and obtaining final acceptance from the customer.

A major portion of our revenue is derived from contractual arrangements with customers that have multiple deliverables, such as installation. The revenue relating to the undelivered elements of the arrangements, the installation, is deferred until delivery of these elements.

Sale of goods

The Company recognizes revenue when persuasive evidence exists, usually in the form of an arrangement, that the goods are delivered and titles have passed, at which time all the following conditions are satisfied:

- › significant risks and rewards of ownership have been transferred to the buyer;
- › there is neither continuing managerial involvement with the goods sold, nor effective control over the goods sold;
- › the amount of the revenue can be measured reliably;
- › it is probable that the economic benefits associated with the transaction will flow to the Group;
- › seller's price to buyer is fixed or determinable;
- › collectability is reasonably assured; and
- › the cost incurred or to be incurred in respect of the transaction can be measured reliably.

In general, the Company recognizes revenue from sales of equipment upon shipment of equipment, only if testing at the factory has proved that the equipment has met substantially all of the customer's criteria and specifications.

Revenue from the sale of spare parts and materials is recognized when the goods are shipped.

Rendering of service

The Company recognizes revenue from installation of equipment upon completion of installation at the customer's site. At the time of shipment, the Company defers that portion of the sales price related to the installation. The relative selling price of the installation process is measured based upon the per-hour amounts charged by third parties for similar installation services. Installation is completed when testing at the customer's site has proved that the equipment has met all of the customer's criteria and specifications. The completion of installation is signed-off by the customer (final acceptance). The revenue relating to the undelivered elements of the arrangements is deferred at their relative selling prices until delivery of these elements.

We provide training and technical support service to customers. Revenue related to such services is recognized when the service is rendered.

Freight charges billed to customers are recognized as revenue, the related costs are recognized as cost of sales. Revenues are recognized excluding the taxes levied on revenues.

Revenue on royalties and licenses

Royalty revenue is recognized on an accrual basis in accordance with the substance of the relevant agreement (provided that it is probable that the economic benefits will flow to the Group and the amount of revenue can be measured reliably). Royalties determined on a time basis are recognized on a straight-line basis over the period of the agreement. Royalty arrangements that are based on production, sales and other measures are recognized by reference to the underlying arrangement.

Cost of sales

Cost of sales comprise direct costs such as labor, materials, cost of warranty, depreciation, shipping and handling costs and related overhead costs. Cost of sales also includes third party commission, depreciation expenses of evaluation tools at customers, royalty payments and costs relating to prototype and experimental products, which the Company may subsequently sell to customers. Costs of warranty include the cost of labor and material necessary to repair a product during the warranty period.

Warranty

We provide maintenance on our systems during the warranty period, on average one year. Costs of warranty include the cost of labor and material necessary to repair a product during the warranty period. We accrue for the estimated cost of the warranty on products shipped in a provision for warranty, upon recognition of the sale of the product. The costs are estimated based on historical expenses incurred and on estimated future expenses related to current sales, and are updated periodically. Actual warranty costs are charged against the provision for warranty. The actual warranty costs may differ from estimated warranty costs, and we adjust our provision for warranty accordingly. Future warranty costs may exceed our estimates, which could result in an increase of our cost of sales.

Income tax

Income tax expense comprises current and deferred tax. It is recognized in the statement of profit or loss except to the extent that it relates to a business combination, or items recognized directly in equity or in other comprehensive income.

Current tax

The current corporate income tax charge recognized in the Consolidated statement of profit or loss is calculated in accordance with the prevailing tax regulations and rates, taking into account non-taxable income and non-deductible expenses. The current income tax expense reflects the amount for the current reporting period that the Company expects to recover from or pay to the tax authorities. Current income tax related to items recognized directly in equity is recorded in equity

and not in the Consolidated statement of profit or loss. ASMI's management periodically evaluates positions taken in the tax returns regarding situations in which applicable tax regulations are subject to interpretation, and establishes provisions when deemed appropriate. Current tax also includes any tax arising from dividends.

Current tax assets and liabilities are offset only if certain criteria are met.

Deferred tax

Deferred income tax positions are recognized for temporary differences between the tax basis of assets and liabilities and their carrying values in ASMI's Consolidated statement of financial position.

Deferred tax assets are recognized for all deductible temporary differences, the carry forward of unused tax credits and any unused tax losses. Deferred tax assets are recognized only to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilized. Both the recognized and unrecognized deferred tax assets are reassessed at each reporting date. Deferred tax assets are recorded for deductible temporary differences associated with investments in subsidiaries and are recorded only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilized.

Deferred tax liabilities are recognized for all taxable temporary differences except when they affect neither the profit or loss reported in the Consolidated statement of profit or loss nor the taxable profit or loss. Also, no deferred tax liabilities are recorded for taxable temporary differences associated with investments in subsidiaries when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax positions are stated at nominal value and are measured at the corporate income tax rates the Company expects to be applicable in the year when the asset is realized or liability is settled based on enacted or substantially enacted tax laws.

Deferred income tax assets and liabilities are netted if there is a legally enforceable right to set off current tax assets against current tax liabilities, deferred income tax assets and deferred income tax liabilities relate to income taxes levied by the same taxation authority on the same taxable entity, and there is an intention to settle on a net basis.

We recognize a liability for uncertain tax positions when it is probable that an outflow of economic resources will occur. Measurement of the liability for uncertain tax positions is based on management's best estimate of the amount of tax benefit that will be lost.

Retirement benefit costs

The Company has retirement plans covering substantially all employees. The principal plans are defined contribution plans, except for the plans of the Company's operations in the Netherlands and Japan. The Company's employees in the Netherlands participate in a multi-employer defined benefit plan. Payments to defined contribution plans and the multi-employer plan are recognized as an expense in the Consolidated Statement of Profit or Loss as they fall due. The Company accounts for the multi-employer plan as if it were a defined contribution plan since the manager of the plan is not able to provide the Company with the required Company-specific information to enable the Company to account for the plan as a defined benefit plan.

The Company's employees in Japan participate in defined benefit plans. Pension costs in respect to this defined benefit plan are determined using the projected unit credit method. These costs primarily represent the increase in the actuarial present value of the obligation for pension benefits based on employee service during the year and the interest on this obligation in respect to employee service in previous years, net of the expected return on plan assets.

For the defined benefit plan the Company recognizes in its Consolidated statement of financial position an asset or a liability for the plan's over-funded status or underfunded status respectively. Actuarial gains and losses are recognized when incurred.

Obligations for contributions to defined contribution plans are expensed as the related service is provided. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in future payments is available.

Share-based payments

The costs relating to employee stock options and shares (compensation expense) are recognized based upon the grant date fair value of the stock options or the shares. The fair value at grant date of employee stock options is estimated using a Black-Scholes option valuation model. This model requires the use of assumptions including expected stock price volatility, the estimated life of each award and the estimated dividend yield. The risk-free interest rate used in the model is determined, based on a euro government bond with a life equal to the expected life of the options. The estimated fair value at grant date of shares is based on the share price of the ASMI share at grant date minus the discounted value of expected dividends during the vesting period.

The grant date fair value of the stock options and shares is expensed on a straight-line basis over the vesting period, based on the Company's estimate of stock options and shares that will eventually vest. The impact of the true up of the estimates is recognized in the Consolidated statement of profit or loss in the period in which the revision is determined. The total estimated share-based compensation expense, determined under the fair value based method is amortized proportionally over the option vesting periods.

Operating lease

Determining whether an arrangement contains a lease

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases. At inception of an arrangement, the Company determines whether the arrangement is or contains a lease.

Lease payments

Payments made under operating leases (net of any incentives received from the lessor) are recognized in the statement of profit or loss on a straight-line basis over the term of the lease.

APPLICATION OF NEW AND REVISED INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)

Amendments to IFRS that are mandatorily effective for the current year

In the current year, the Company has applied a number of amendments to IFRS issued by the International Accounting Standards Board (IASB) that are mandatorily effective for an accounting period that begins on or after January 1, 2017.

Disclosure Initiative (Amendments to IAS 7)

The amendments require disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities, including changes arising from cash flow as well as non-cash changes.

The Company has applied these amendments for the first time in the current year. The amendments require an entity to provide disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both cash and non-cash changes. The Company currently has no liabilities arising from financing activities. As such, the application of these amendments has had no impact on the Company's Consolidated financial statements.

Recognition of Deferred Tax Assets for Unrealized Losses (Amendments to IAS 12)

The Company has applied these amendments for the first time in the current year. The amendments clarify how an entity should evaluate whether there will be sufficient future taxable profits against which it can utilize a deductible temporary difference.

The application of these amendments has had no impact on the Company's Consolidated financial statements as the Company already assesses the sufficiency of future taxable profits in a way that is consistent with these amendments.

Annual Improvements to IFRS 2014-2016 Cycle

The Company has applied the amendments to IFRS 12 included in the Annual Improvements to IFRS 2014-2016 Cycle for the first time in the current year. The other amendments included in this package are not yet mandatorily effective and they have not been early adopted by the Company.

IFRS 12 states that an entity need not provide summarized financial information for interests in subsidiaries, associates or joint ventures that are classified (or included in a disposal group that is classified) as held for sale. The amendments clarify that this is the only concession from the disclosure requirements of IFRS 12 for such interests.

The application of these amendments has had no effect on the Company's consolidated financial statements as none of the Company's interests in these entities are classified, or included in a disposal group that is classified, as held for sale.

New and revised IFRS in issue but not yet effective

The Company has not applied the following new and revised IFRS that have been issued but are not yet effective:

- › IFRS 9 Financial Instruments¹
- › IFRS 15 Revenue from Contracts with Customers (and the related Clarifications)¹
- › IFRS 16 Leases²
- › Amendments to IFRS 2 Classification and Measurement of Share-based Payment Transactions¹
- › Amendments to IFRS 10 and IAS 28 Sale or Contribution of Assets between an Investor and its Associate or Joint Venture³
- › Amendments to IAS 40 Transfers of Investment Property¹
- › Amendments to IFRS Annual Improvements to IFRS 2014-2016 Cycle¹
- › IFRIC 22 Foreign Currency Transactions and Advance Consideration¹

¹ Effective for annual periods beginning on or after January 1, 2018, with earlier application permitted.

² Effective for annual periods beginning on or after January 1, 2019, with earlier application permitted.

³ Effective for annual periods beginning on or after a date to be determined.

IFRS 9 Financial Instruments

IFRS 9 issued in November 2009 introduced new requirements for the classification and measurement of financial assets. IFRS 9 was subsequently amended in October 2010 to include requirements for the classification and measurement of financial liabilities and for derecognition, and in November 2013 to include the new requirements for general hedge accounting. Another revised version of IFRS 9 was issued in July 2014 mainly to include a) impairment requirements for financial assets and b) limited amendments to the classification and measurement requirements by introducing a 'fair value through other comprehensive income' (FVTOCI) measurement category for certain simple debt instruments.

Key requirements of IFRS 9

All recognized financial assets that are within the scope of IFRS 9 are required to be subsequently measured at amortized cost or fair value.

Classification and measurement

All financial assets and financial liabilities will continue to be measured on the same bases as is currently adopted under IAS 39.

Impairment

In relation to the impairment of financial assets, IFRS 9 requires an expected credit loss model, as opposed to an incurred credit loss model under IAS 39. The expected credit loss model requires an entity to account for expected credit losses and changes in those expected credit losses at each reporting date to reflect changes in credit risk since initial recognition. In other words, it is no longer necessary for a credit event to have occurred before credit losses are recognized.

In general, management anticipates that the application of the expected credit loss model of IFRS 9 will result in earlier recognition of credit losses for the respective items. However in general balances are considered to be recoverable and as a result this will not increase the amount of loss allowance recognized for these items.

Hedge accounting

Hedge accounting is not applied and as such management does not anticipate that the application of the IFRS 9 hedge accounting requirements will have a material impact on the Company's Consolidated financial statements.

Based on an analysis of the Company's financial assets and financial liabilities as at December 31, 2017 on the basis of the facts and circumstances that exist at that date, management of the

Company have assessed the impact of IFRS 9 to the Company's consolidated financial statements and as described above expects no material impact.

The new standard contains certain exemptions from full retrospective application, including an exemption from the requirement to restate comparative information about classification and measurement, including impairment.

We elected to use these exemptions and include a cumulative-effect adjustment in retained earnings as of the beginning of the first reporting period in which the standard is effective. We will therefore not restate prior year presented in our Consolidated financial statements upon adoption.

IFRS 15 Revenue from Contracts with Customers

IFRS 15 establishes a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers. IFRS 15 will supersede the current revenue recognition guidance including IAS 18 Revenue, IAS 11 Construction Contracts and the related Interpretations when it becomes effective.

The core principle of IFRS 15 is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.

Specifically, the Standard introduces a 5-step approach to revenue recognition:

- 1 step 1: Identify the contract(s) with a customer
- 2 step 2: Identify the performance obligations in the contract
- 3 step 3: Determine the transaction price
- 4 step 4: Allocate the transaction price to the performance obligations in the contract
- 5 step 5: Recognize revenue when (or as) the entity satisfies a performance obligation

Under IFRS 15, an entity recognizes revenue when (or as) a performance obligation is satisfied, i.e. when 'control' of the goods or services underlying the particular performance obligation is transferred to the customer.

Far more prescriptive guidance has been added in IFRS 15 to deal with specific scenarios. Furthermore, extensive disclosures are required by IFRS 15.

In April 2016, the IASB issued Clarifications to IFRS 15 in relation to the identification of performance obligations, principal versus agent considerations, as well as licensing application guidance.

The new standard is effective for interim and annual periods beginning after January 1, 2018 and allows for either full retrospective adoption or modified retrospective adoption. We selected full retrospective adoption and will therefore restate 2017 presented in our Consolidated financial statements upon adoption in 2018.

We are finalizing our IFRS 15 implementation project comprising of two phases. Phase 1 involves a detailed analysis of the impact of the principles of the new standard on our major contracts with customers. Based on the contract analysis, a detailed concept has been developed for the transition of revenue recognition to the new principles, including the need for adjustments to existing processes and IT systems. The subsequent phase 2 of the project has served to implement the adjustments identified in phase 1. We have finalized the contract assessment and are finalizing the full qualitative impact analysis. We concluded that the timing of recognition for installation, conditional equipment sales and fixed fee royalties are to be impacted.

At this time, we cannot reasonably estimate the exact financial impact of implementing this new standard. However, for 2017 we expect an impact of our total net sales between 0 and 1.5% and an impact of our net earnings between 0 and 7.5% due to a shift in timing of revenue recognition.

IFRS 16 Leases

IFRS 16 Leases was issued in January 2016. The standard has an effective date of January 1, 2019. IFRS 16 was endorsed in November 2017. IFRS 16 introduces a comprehensive model for the identification of lease arrangements and accounting treatments for both lessors and lessees. IFRS 16 will supersede the current lease guidance including IAS 17 Leases and the related interpretations when it becomes effective.

IFRS 16 distinguishes leases and service contracts on the basis of whether an identified asset is controlled by a customer. Distinctions of operating leases (off balance sheet) and finance leases (on balance sheet) are removed for lessee accounting, and is replaced by a model where a right-of-use asset and a corresponding liability have to be recognized for all leases by lessees (i.e. all on balance sheet) except for short-term leases and leases of low value assets.

The right-of-use asset is initially measured at cost and subsequently measured at cost (subject to certain exceptions) less accumulated depreciation and impairment losses, adjusted for any remeasurement of the lease liability. The lease liability is initially measured at the present value of the lease payments that are not paid at that date. Subsequently, the lease liability is adjusted for interest and lease payments, as well as the impact of lease modifications, amongst others. Furthermore, the classification of cash flows will also be affected as operating lease payments under IAS 17 are presented as operating cash flows; whereas under the IFRS 16 model, the lease payments will be split into a principal and an interest portion which will be presented as financing and operating cash flows respectively.

In contrast to lessee accounting, IFRS 16 substantially carries forward the lessor accounting requirements in IAS 17, and continues to require a lessor to classify a lease either as an operating lease or a finance lease.

Furthermore, extensive disclosures are required by IFRS 16.

As at December 31, 2017, the Company has non-cancellable operating lease commitments of €19 million. IAS 17 does not require the recognition of any right-of-use asset or liability for future payments for these leases; instead, certain information is disclosed as operating lease commitments in Note 17.

A preliminary assessment indicates that these arrangements will meet the definition of a lease under IFRS 16, and hence the Company will recognize a right-of-use asset and a corresponding liability in respect of all these leases unless they qualify for low value or short-term leases upon the application of IFRS 16.

The new requirement to recognize a right-of-use asset and a related lease liability is expected to have an impact on the amounts recognized in the Company's Consolidated financial statements and management is currently assessing its potential impact. Also, an impact is expected on our Consolidated statement of profit or loss. Result from operations is expected to increase, but the impact on income before income taxes is not expected to be material. It is not practicable to provide a reasonable estimate of the financial effect until management complete the review.

Amendments to IFRS 2 Classification and Measurement of Share-based Payment Transactions

The amendments clarify the following:

- 1 in estimating the fair value of a cash-settled share-based payment, the accounting for the effects of vesting and non-vesting conditions should follow the same approach as for equity-settled share-based payments.
- 2 where tax law or regulation requires an entity to withhold a specified number of equity instruments equal to the monetary value of the employee's tax obligation to meet the employee's tax liability which is then remitted to the tax authority, i.e. the share-based payment arrangement has a 'net settlement feature', such an arrangement should be classified as equity-settled in its entirety, provided that the share-based payment would have been classified as equity-settled had it not included the net settlement feature.
- 3 a modification of a share-based payment that changes the transaction from cash-settled to equity-settled should be accounted for as follows:
 - › the original liability is derecognized;
 - › the equity-settled share-based payment is recognized at the modification date fair value of the equity instrument granted to the extent that services have been rendered up to the modification date; and
 - › any difference between the carrying amount of the liability at the modification date and the amount recognised in equity should be recognized in profit or loss immediately.

The amendments are effective for annual reporting periods beginning on or after January 1, 2018 with earlier application permitted.

Management of the Company does not anticipate that the application of the amendments in the future will have a significant impact on the Company's Consolidated financial statements as the Company does not have withholding tax arrangements with tax authorities in relation to share-based payments.

Amendments to IFRS 10 and IAS 28 Sale or Contribution of Assets between an Investor and its Associate or Joint Venture

The amendments to IFRS 10 and IAS 28 deal with situations where there is a sale or contribution of assets between an investor and its associate or joint venture. Specifically, the amendments state that gains or losses resulting from the loss of control of a subsidiary that does not contain a business in a transaction with an associate or a joint venture that is accounted for using the equity method, are recognized in the parent's profit or loss only to the extent of the unrelated investors' interests in that associate or joint venture. Similarly, gains and losses resulting from the remeasurement of investments retained in any former subsidiary (that has become an associate or a joint venture that is accounted for using the equity method) to fair value are recognized in the former parent's profit or loss only to the extent of the unrelated investors' interests in the new associate or joint venture.

The effective date of the amendments has yet to be set by the IASB; however, earlier application of the amendments is permitted. Management of the Company anticipates that the application of these amendments may have an impact on the Company's Consolidated financial statements in future periods should such transactions arise.

Amendments to IAS 40 Transfers of Investment Property

Because the Company does not have investment property stated on the statement of financial position, management concluded that the amendments will have no impact.

Amendments to IFRS Annual Improvements to IFRS 2014-2016 Cycle

The annual improvements include amendments to IFRS 1 and IAS 28 which are not yet mandatorily effective for the Company.

Both the amendments to IFRS 1 and IAS 28 are effective for annual periods beginning on or after January 1, 2018. Management of the Company does not anticipate that the application of the amendments in the future will have any impact on the Company's Consolidated financial statements as the Company is neither a first-time adopter of IFRS nor a venture capital organization. Furthermore, the Company does not have any associate or joint venture that is an investment entity.

IFRIC 22 Foreign Currency Transactions and Advance Consideration

IFRIC 22 addresses how to determine the 'date of transaction' for the purpose of determining the exchange rate to use on initial recognition of an asset, expense or income, when consideration for that item has been paid or received in advance in a foreign currency which resulted in the recognition of a non-monetary asset or non-monetary liability (e.g. a non-refundable deposit or deferred revenue).

The Interpretation specifies that the date of transaction is the date on which the entity initially recognizes the non-monetary asset or non-monetary liability arising from the payment or receipt of advance consideration. If there are multiple payments or receipts in advance, the Interpretation requires an entity to determine the date of transaction for each payment or receipt of advance consideration.

The Interpretation is effective for annual periods beginning on or after January 1, 2018 with earlier application permitted. Entities can apply the Interpretation either retrospectively or prospectively. Specific transition provisions apply to prospective application.

Management of the Company does not anticipate that the application of the amendments in the future will have an impact on the Company's Consolidated financial statements. This is because the Company already accounts for transactions involving the payment or receipt of advance consideration in a foreign currency in a way that is consistent with the amendments.

NOTE 2. SUBSIDIARIES

Unless otherwise indicated, these are, directly or indirectly, wholly-owned subsidiaries. With respect to the separate financial statements of the Dutch legal entities included in the consolidation, the Company availed itself of the exemption laid down in section 403, subsection 1 of Book 2 of the Dutch Civil Code.

The location included below is the principal place of business of the specified subsidiaries. There is no difference between the principal place of business and country of incorporation.

NAME	LOCATION	% OWNERSHIP DECEMBER 31,	
		2016	2017
Subsidiaries (consolidated)			
ASM Europe BV ¹⁾	Almere, the Netherlands	100%	100%
ASM United Kingdom Sales BV ¹⁾	Almere, the Netherlands	100%	100%
ASM Germany Sales BV ¹⁾	Almere, the Netherlands	100%	100%
ASM Pacific Holding BV ^{1) 2)}	Almere, the Netherlands	100%	100%
ASM France SARL	Crolles, France	100%	100%
ASM Belgium NV	Leuven, Belgium	100%	100%
ASM Italia Srl	Milano, Italy	100%	100%
ASM Microchemistry Oy	Helsinki, Finland	100%	100%
ASM Services and Support Ireland Ltd	Dublin, Ireland	100%	100%
ASM Services and Support Israel Ltd	Kiryat Gat, Israel	100%	100%
ASM America Inc	Phoenix, Arizona, United States of America	100%	100%
ASM Japan KK	Tokyo, Japan	100%	100%
ASM Netherlands Holding BV	Almere, the Netherlands	100%	100%
ASM China Ltd	Shanghai, People's Republic of China	100%	100%
ASM Wafer Process Equipment Singapore Pte Ltd	Singapore	100%	100%
ASM Front-End Sales & Services Taiwan Co Ltd	Hsin-Chu, Taiwan	100%	100%
ASM Services & Support Malaysia SDN BHD	Kulim, Malaysia	100%	100%
ASM Front-End Manufacturing Singapore Pte Ltd	Singapore	100%	100%
ASM Korea Ltd	Cheonan, South Korea	100%	100%
ASM IP Holding BV ¹⁾	Almere, the Netherlands	100%	100%
ASM NuTool Inc	Phoenix, Arizona, United States of America	100%	100%
ASM Europe Holding BV	Almere, the Netherlands	100%	liquidated
ASM Ion Implant BV	Almere, the Netherlands	100%	liquidated
Hamilcar Investments BV	Almere, the Netherlands	100%	liquidated
CVTR Development BV	Almere, the Netherlands	100%	liquidated
Rembrandt Lease and Finance BV	Almere, the Netherlands	100%	liquidated
ASM Wafer Process Equipment Ltd	Kwai Chung, Hong Kong, People's Republic of China	100%	100%

¹ For these subsidiaries ASM International NV has filed statements at the Dutch Chamber of Commerce assuming joint and several liability in accordance with Article 403 of Book 2, Part 9 of the Dutch Civil Code.

² ASM Pacific Holding BV holds 25.18% of the shares in ASM Pacific Technology Ltd.

NOTE 3. PROPERTY, PLANT AND EQUIPMENT

The changes in the amount of property, plant and equipment are as follows:

	LAND, BUILDINGS AND LEASEHOLD IMPROVEMENTS	MACHINERY, EQUIPMENT	FURNITURE AND FIXTURES AND OTHER EQUIPMENT	ASSETS UNDER CONSTRUCTION	TOTAL
At cost					
BALANCE JANUARY 1, 2016	43,294	158,901	19,490	14,735	236,420
Capital expenditures	–	7,181	427	19,282	26,890
Retirements and sales	(48)	(6,734)	(595)	(360)	(7,737)
Transfer from assets under construction	1,370	14,453	1,732	(17,555)	–
Reclassification to other intangible assets	–	–	–	(21)	(21)
Reclassification to evaluation tools	–	–	–	(1,633)	(1,633)
Foreign currency translation effect	1,556	4,907	917	841	8,221
BALANCE DECEMBER 31, 2016	46,172	178,708	21,971	15,289	262,140
Capital expenditures	225	1,619	790	41,537	44,171
Retirements and sales	(1,643)	(10,308)	(1,201)	–	(13,152)
Transfer from assets under construction	3,244	32,391	904	(36,539)	–
Reclassification to other intangible assets	–	–	66	–	66
Reclassification to evaluation tools	–	–	–	–	–
Foreign currency translation effect	(3,226)	(16,357)	(1,638)	(1,391)	(22,612)
BALANCE DECEMBER 31, 2017	44,772	186,053	20,892	18,896	270,613
Accumulated depreciation and impairment					
BALANCE JANUARY 1, 2016	25,401	102,114	17,111		144,626
Depreciation for the year	1,811	19,413	1,019		22,243
Impairment charges	–	1,745	–		1,745
Retirements and sales	(2)	(6,270)	(595)		(6,867)
Foreign currency translation effect	820	3,778	791		5,389
BALANCE DECEMBER 31, 2016	28,030	120,780	18,326		167,136
Depreciation for the year	1,959	20,648	1,281		23,888
Impairment charges	–	–	–		–
Retirements and sales	(1,632)	(9,497)	(1,201)		(12,330)
Foreign currency translation effect	(1,871)	(11,457)	(1,385)		(14,713)
BALANCE DECEMBER 31, 2017	26,486	120,474	17,021		163,981
Carrying amounts					
DECEMBER 31, 2016	18,142	57,928	3,645	15,289	95,004
DECEMBER 31, 2017	18,286	65,579	3,871	18,896	106,632
Useful lives in years	0-25	2-10	2-10		

The impairment charges in 2016 relate to demo equipment and is reported in the Consolidated statement of profit or loss in cost of sales.

NOTE 4. GOODWILL

The carrying amount of the goodwill is related to the acquisitions operations in the following business units:

	DECEMBER 31,	
	2016	2017
Thermal products business unit	2,611	2,611
Plasma products business unit	8,659	8,659
TOTAL	11,270	11,270

We perform an annual impairment test on December 31 of each year or if events or changes in circumstances indicate that the carrying amount of goodwill exceeds its recoverable amount. For the Front-end impairment test and the determination of the recoverable amount, a discounted future cash flow approach is used which makes use of our estimates of future revenues, driven by assumed market growth and estimated costs as well as appropriate discount rates.

The material assumptions used for the discounted future cash flows of the cash generating units (CGUs) are:

- › an average discount rate of 11.5% (2016: 11.2%) representing the pre-tax weighted average cost of capital;
- › external market segment data, historical data and strategic plans to estimate cash flow growth per product line; and
- › cash flow calculations are limited to four years of cash flow; after these four years perpetuity growth rates are set based on the market maturity of the products. For a maturing product, the perpetuity growth rates used are 1% or less and for enabling technology products the rate used is 3% or less.

These estimates are consistent with the plans and estimated costs we use to manage the underlying business. Based on this analysis, management concluded that as per December 31, 2017 the recoverable amount of the CGUs exceeded the carrying value. The excess was over 100% for each of the CGUs. Sensitivity analysis demonstrated that no reasonable possible change in estimated cash flows or the discount rate used in calculating the fair value would cause the carrying value of goodwill to exceed the fair value.

For Back-end, goodwill is included in the investment value of ASMPT. For the impairment test, reference is made to Note 6.

NOTE 5. OTHER INTANGIBLE ASSETS

Other intangible assets include capitalized development expenditure, software developed or purchased (including licenses) for internal use and purchased technology from third parties. The changes in the amount of other intangible assets are as follows:

	DEVELOPMENT COSTS	SOFTWARE	PURCHASED TECHNOLOGY AND OTHER INTANGIBLE ASSETS	TOTAL
At cost				
BALANCE JANUARY 1, 2016	117,983	21,203	11,704	150,890
Additions	27,327	7,024	–	34,351
Reclassification	–	21	–	21
Disposals	–	(1)	–	(1)
Foreign currency translation effect	4,384	191	125	4,700
BALANCE DECEMBER 31, 2016	149,694	28,438	11,829	189,961
Additions	38,615	2,335	58	41,008
Reclassification	–	(66)	–	(66)
Disposals	–	(242)	–	(242)
Foreign currency translation effect	(14,622)	(638)	(387)	(15,647)
BALANCE DECEMBER 31, 2017	173,687	29,827	11,500	215,014
Accumulated amortization and impairment losses				
BALANCE JANUARY 1, 2016	45,505	15,614	8,236	69,355
Amortization for the year	13,345	655	1,204	15,204
Impairments	3,575	–	–	3,575
Disposals	–	(1)	–	(1)
Foreign currency translation effect	1,343	181	125	1,649
BALANCE DECEMBER 31, 2016	63,768	16,449	9,565	89,782
Amortization for the year	13,288	1,493	678	15,459
Impairments	4,337	–	–	4,337
Disposals	–	(242)	–	(242)
Foreign currency translation effect	(6,627)	(602)	(388)	(7,617)
BALANCE DECEMBER 31, 2017	74,766	17,098	9,855	101,719
Carrying amounts				
DECEMBER 31, 2016	85,926	11,989	2,264	100,179
DECEMBER 31, 2017	98,921	12,729	1,645	113,295

Impairment charges on capitalized development costs are included in operating expenses under research and development. Impairment of capitalized development expenses primarily related to development of new hardware for which customer demand has shifted out in time, and purchased technology which became obsolete. The impairment charges for 2016 and 2017 related to customer specific projects.

Capitalized development costs are amortized over their estimated useful lives of five years, other intangible assets are amortized over their estimated useful lives of three to seven years.

Estimated amortization expenses relating to other intangible assets are as follows:

	DEVELOPMENT COSTS	SOFTWARE	PURCHASED TECHNOLOGY AND OTHER INTANGIBLE ASSETS	TOTAL
2018	9,811	3,116	670	13,597
2019	20,858	4,486	670	26,014
2020	20,791	3,490	285	24,566
2021	17,536	1,630	10	19,176
2022	15,306	7	10	15,323
Years thereafter	14,619	–	–	14,619
TOTAL	98,921	12,729	1,645	113,295

NOTE 6. INVESTMENTS IN ASSOCIATES

The location included below is the principal place of business of the specified associates. There is no difference between the principal place of business and country of incorporation.

NAME	LOCATION	% OWNERSHIP DECEMBER 31,	
		2016	2017
Associates			
Levitech BV	Almere, the Netherlands	26.64%	26.64%
ASM Pacific Technology Ltd	Kwai Chung, Hong Kong, People's Republic of China	39.19%	25.18%

The changes in the investment and associates are as follows:

	LEVITECH	NET EQUITY SHARE	OTHER (IN)TANGIBLE ASSETS	GOODWILL	TOTAL ASMPT	TOTAL
BALANCE JANUARY 1, 2016	-	375,172	147,539	647,598	1,170,309	1,170,309
Share in net earnings of investments in associates	-	67,711	-	-	67,711	67,711
Other comprehensive income of investments in associates	-	(1,344)	-	-	(1,344)	(1,344)
Amortization recognized (in)tangible assets	-	-	(27,223)	-	(27,223)	(27,223)
Dividends	-	(22,083)	-	-	(22,083)	(22,083)
Dilution ASMPT share to 39.19%	-	9,336	(729)	(5,793)	2,814	2,814
Foreign currency translation effect	-	3,740	3,624	20,476	27,840	27,840
BALANCE DECEMBER 31, 2016	-	432,532	123,211	662,281	1,218,024	1,218,024
Share in net earnings of investments in associates	-	112,424	-	-	112,424	112,424
Other comprehensive income of investments in associates	-	(2,580)	-	-	(2,580)	(2,580)
Carrying amount of the divestment	-	(169,675)	(34,557)	(217,321)	(421,553)	(421,553)
Amortization recognized (in)tangible assets	-	-	(22,811)	-	(22,811)	(22,811)
Dividends	-	(36,458)	-	-	(36,458)	(36,458)
Dilution ASMPT share to 25.18%	-	1,491	(112)	(773)	606	606
Foreign currency translation effect	-	(32,063)	(11,991)	(73,046)	(117,100)	(117,100)
BALANCE DECEMBER 31, 2017	-	305,671	53,740	371,141	730,552	730,552

On March 15, 2013, the Company divested a controlling stake in its subsidiary ASM Pacific Technology Ltd (ASMPT). After the initial accounting of the sale transaction and related gains, future income from ASMPT was adjusted for the fair value adjustments arising from the basis differences as if a business combination had occurred under IFRS 3R, Business Combinations, i.e. a purchase price allocation (PPA).

The purchase of the associate has been recognized at fair value, being the value of the ASMPT shares on the day of closing of the purchase transaction. The composition of this fair value was determined through a PPA. The PPA resulted in the recognition of intangible assets for customer relationship, technology, trade name, product names and goodwill. For inventories and property, plant & equipment, a fair value adjustment was recognized.

The ASMPT investment is accounted for under the equity method on a go-forward basis. Equity method investments are tested for prolonged impairment. An investment is considered impaired if the fair value of the investment is less than its carrying value.

If the fair value of an investment is less than its carrying value at the balance sheet date, the Company determines whether the impairment is temporary or prolonged. The amount per share recognized as per December 31, 2017 under equity accounting amounts to HK\$66.47, whereas the level 1 fair value per share (being the market price of a share on the Hong Kong Stock Exchange) was HK\$108.90 as per December 31, 2017. Management concluded that based on quantitative analysis no impairment of its share in ASMPT existed as per December 31, 2017.

In April 2017, the Company divested a 4.9% stake in ASMPT for the proceeds of €246 million. In November 2017, the Company divested a 9.1% stake for the proceeds of €445 million. The Company has accounted for the remaining stake as an associate because the Company continues to have significant influence in ASMPT. The Company was considered to have significant influence over this entity due to the fact that it had board representation.

	2017
Proceeds of divestments	690,660
Plus: realized currency translation adjustment	15,791
Less: carrying amount of divestments	421,553
Gain recognized	284,898

In December 2017, 2,238,100 common shares of ASMPT were issued, for cash at par value of HK\$ 0.10 per share, pursuant to the Employee Share Incentive Scheme of ASMPT. The shares issued under the plan in 2017 have diluted ASMI's ownership in ASMPT further to 25.18% as of December 31, 2017.

Per December 31, 2017, the book value of our equity method investment in ASMPT was €731 million. The historical cost basis of our 25.18% share of net assets on the books of ASMPT under IFRS was €306 million as of December 31, 2017, resulting in a basis difference of €425 million. €54 million of this basis difference has been allocated to property, plant and equipment, and intangible assets. The remaining amount was allocated to equity method goodwill. Each individual, identifiable asset will periodically be reviewed for any indicators of potential impairment. We amortize the basis differences allocated to the assets on a straight-line basis, and include the impact within the results of our equity method investments. Amortization and depreciation are adjusted for related deferred tax impacts. Included in net income attributable to ASMI for 2017 was after-tax expense of €23 million, representing the depreciation and amortization of the basis differences.

The market value of our 25.18% investment in ASMPT on December 31, 2017 approximates €1,197 million.

Summarized 100% earnings information for ASMPT equity method investment excluding basis adjustments (foreign currency exchange rate average 2017 1 HK\$: €0.11378, for December 31, 2016: 1 HK\$: €0.11698).

(HK\$ million)	2016	2017
Net sales	14,249	17,523
Income before income tax	1,793	3,274
Net earnings	1,438	2,796
Other comprehensive income	(237)	578
TOTAL COMPREHENSIVE INCOME	1,201	3,374

Summarized 100% statement of financial position information for ASMPT equity method investment excluding basis adjustments (foreign currency exchange rate per December 31, 2017 was 1 HK\$: €0.10670 for December 31, 2016: 1 HK\$: €0.12232).

	DECEMBER 31,	2016	2017
(HK\$ million)			
Current assets	11,918	14,572	
Non-current assets	3,721	4,029	
Current liabilities	6,237	4,784	
Non-current liabilities	376	2,439	
Equity	9,026	11,377	

Equity of ASMPT per December 31, 2017 translated into euros at a rate of 0.10670 was €1,214 million (our 25.18% share: €306 million).

The ASMPT Board is responsible for ongoing monitoring of the performance of the Back-end activities. The actual results of the Back-end operating unit are discussed with the ASMPT Audit Committee, which includes the representative of ASMI. The ASMI representative reports to the ASMI Management Board and the Audit Committee of ASMI on a quarterly basis.

Our share of income taxes incurred directly by the associates is reported in result from investments in associates and as such is not included in income taxes in our Consolidated financial statements.

NOTE 7. EVALUATION TOOLS AT CUSTOMERS

The changes in the amount of evaluation tools are as follows:

	DECEMBER 31,	
	2016	2017
At cost		
BALANCE AT BEGINNING OF YEAR	38,631	49,040
Evaluation tools shipped	28,490	25,082
Evaluation tools sold	(22,038)	(24,770)
Reclassification from assets under construction	1,633	–
Foreign currency translation effect	2,325	(4,938)
BALANCE AT END OF YEAR	49,040	44,414
Accumulated depreciation and impairment		
BALANCE AT BEGINNING OF YEAR	(9,632)	(12,446)
Depreciation for the year	(8,902)	(8,224)
Impairment charges	–	–
Evaluation tools sold	6,605	4,621
Foreign currency translation effect	(518)	1,345
BALANCE AT END OF YEAR	(12,446)	(14,704)
CARRYING AMOUNT AT BEGINNING OF YEAR	28,999	36,594
CARRYING AMOUNT AT END OF YEAR	36,594	29,710

Useful lives in years:

5

NOTE 8. INVENTORIES

Inventories consist of the following:

	DECEMBER 31,	
	2016	2017
Components and raw materials		
Work in progress	30,614	37,047
Finished goods	12,618	14,218
TOTAL INVENTORIES, GROSS	127,866	155,598
Allowance for obsolescence	(15,527)	(12,749)
TOTAL INVENTORIES, NET	112,339	142,849

The changes in the allowance for obsolescence are as follows:

	DECEMBER 31,	
	2016	2017
BALANCE AT BEGINNING OF YEAR	(19,350)	(15,527)
Charged to cost of sales	(6,120)	(6,312)
Reversals	5,012	4,973
Utilization of the provision	5,178	3,085
Foreign currency translation effect	(247)	1,032
BALANCE AT END OF YEAR	(15,527)	(12,749)

On December 31, 2017, our allowance for inventory obsolescence amounted to €12,749, which is 8.2% of total inventory. The major part of the allowance is related to components and raw materials. The addition for the years 2016 and 2017 mainly relate to inventory items which ceased to be used due to technological developments and design changes which resulted in obsolescence of certain parts.

The cost of inventories recognized as costs and included in cost of sales amounted to €336.4 million (2016: €243.4 million).

NOTE 9. ACCOUNTS RECEIVABLE

A significant percentage of our accounts receivable is derived from sales to a limited number of large multinational semiconductor device manufacturers located throughout the world. In order to monitor potential credit losses, we perform ongoing credit evaluations of our customers' financial condition.

The carrying amount of accounts receivable is as follows:

	DECEMBER 31,	
	2016	2017
Current	104,954	131,688
Overdue <30 days	7,152	15,784
Overdue 31-60 days	6,330	8,776
Overdue 61-120 days	12,531	2,800
Overdue >120 days	6,053	4,087
TOTAL	137,020	163,135

An allowance for doubtful accounts receivable is maintained for potential credit losses based upon management's assessment of the expected collectability of all accounts receivable. The allowance for doubtful accounts is reviewed periodically to assess the adequacy of the allowance. In making this assessment, management takes into consideration any circumstances of which we are aware regarding a customer's inability to meet its financial obligations, and our judgments as to potential prevailing economic conditions in the industry and their potential impact on the Company's customers.

The changes in the allowance for doubtful accounts receivable are as follows:

	DECEMBER 31,	
	2016	2017
BALANCE AT BEGINNING OF YEAR	(44)	(94)
Charged to selling, general and administrative expenses	(52)	-
Utilization of the provision	-	94
Foreign currency translation effect	2	-
BALANCE AT END OF YEAR	(94)	-

Accounts receivable are impaired and provided for on an individual basis. As of December 31, 2017, accounts receivable of €31 million were past due but not impaired. These balances are still

considered to be recoverable because they relate to customers for whom there is neither recent history of default nor expectation that this will incur.

For further information on credit risk see Note 16.

NOTE 10. CASH AND CASH EQUIVALENTS

Cash and cash equivalents at December 31, 2017 include deposits with financial institutions that have good credit ratings of €112 million (2016: €99 million), investments in money market funds that invest in debt securities of financial institutions that have good credit rating and governments of €467 million (2016: €24 million) and interest-bearing bank accounts of €257 million (2016: €255 million). Our cash and cash equivalents are predominantly denominated in Euros and US dollars, and partly in Singapore dollars, Korean won, and Japanese yen.

Bank guarantees exist for an amount of €779 at December 31, 2017 (€827 as per December 31, 2016).

Cash and cash equivalents have insignificant interest rate risk and remaining maturities of three months or less at the date of acquisition. Except for an amount of €3.4 million (2016: €3.7 million), no restrictions on usage of cash and cash equivalents exist. The carrying amount of these assets approximates to their fair value.

NOTE 11. EQUITY

Our Management Board has the power to issue ordinary shares and (financing) preference shares insofar as the Management Board has been authorized to do so by the Annual General Meeting of Shareholders (AGM). The Management Board requires the approval of the Supervisory Board for such an issue. The authorization by the AGM can only be granted for a certain period. In the case that the AGM has not authorized the Management Board to issue shares, the AGM shall have the power to issue shares.

COMMON SHARES, PREFERRED AND FINANCING PREFERRED SHARES

The authorized capital of the Company amounts to 110,000,000 common shares of €0.04 par value, 118,000 preferred shares of €40 par value and 8,000 financing preferred shares of €40 par value.

The AGM of May 22, 2017, approved the cancellation of 1.5 million treasury shares. This became effective as per August 1, 2017.

As per December 31, 2017, 62,297,394 ordinary shares with a nominal value of €0.04 each were issued and fully paid up, of which 6,157,241 ordinary shares are held by us in treasury. All shares have one vote per €0.04 par value. Treasury shares held by the Company cannot be voted on. Of our 56,140,153 outstanding common shares at December 31, 2017, 55,783,384 are registered with our transfer agent in the Netherlands, ABN AMRO Bank NV, and 356,769 are registered with our transfer agent in the United States, Citibank, NA, New York.

Financing preferred shares are designed to allow ASMI to finance equity with an instrument paying a preferred dividend, linked to EURIBOR loans and government loans, without the dilutive effects of issuing additional common shares.

Preferred and financing preferred shares are issued in registered form only and are subject to transfer restrictions. Essentially, a preferred or financing preferred shareholder must obtain the approval of the Company's Supervisory Board to transfer shares. If approval is denied, the Supervisory Board will provide a list of acceptable prospective buyers who are willing to purchase the shares at a cash price to be fixed by consent of the Supervisory Board and seller within two months after the approval is denied. If the transfer is approved, the shareholder must complete the transfer within three months, at which time the approval expires.

Preferred shares are entitled to a cumulative preferred dividend based on the amount paid up on such shares. Financing preferred shares are entitled to a cumulative dividend based on the par value and share premium paid on such shares.

As per December 31, 2017 no preferred shares are issued.

PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

On May 22, 2017, the AGM authorized the Company, for an 18-month period, to be calculated from the date of the AGM, to repurchase its own shares up to 10% of the issued capital, at a price at least equal to the shares' nominal value and at most a price equal to 110% of the shares' average closing price according to the listing on the Euronext Amsterdam stock exchange during the five trading days preceding the purchase date.

On October 28, 2015, ASMI announced a share buyback program to purchase up to an amount of €100 million of its own shares within the 2015-2016 time frame.

The following table provides a summary of shares repurchased by ASMI under this program:

PERIOD	TOTAL NUMBER OF SHARES PURCHASED	AVERAGE PRICE PAID PER SHARE (EUR)	CUMULATIVE NUMBER OF SHARES PURCHASED
Share buyback program 2015-2016:			
November, 2015	23,788	€37.59	23,788
December, 2015	228,191	€36.16	251,979
January, 2016	209,682	€34.29	461,661
February, 2016	407,902	€36.36	869,563
March, 2016	273,296	€38.71	1,142,859
April, 2016	272,475	€37.94	1,415,334
May, 2016	154,101	€34.91	1,569,435
June, 2016	226,996	€34.75	1,796,431
July, 2016	273,058	€35.83	2,069,489
August, 2016	312,157	€33.60	2,381,646
September, 2016	242,751	€35.10	2,624,397
October, 2016	106,095	€37.36	2,730,492
November, 2016	42,237	€38.93	2,772,729
TOTAL	2,772,729	€35.98	

On October 26, 2016, ASMI announced a share buyback program to purchase up to an amount of €50 million of its own shares within the 2016-2017 time frame. On March 2, 2017, ASMI announced an increase in the 2016-2017 share buyback program to €100 million.

The following table provides a summary of shares repurchased by ASMI under this program:

PERIOD	TOTAL NUMBER OF SHARES PURCHASED	AVERAGE PRICE PAID PER SHARE (EUR)	CUMULATIVE NUMBER OF SHARES PURCHASED
Share buyback program 2016-2017:			
December, 2016	153,022	€42.30	153,022
January, 2017	143,498	€43.46	296,520
February, 2017	157,326	€47.56	453,846
March, 2017	330,000	€49.47	783,846
April, 2017	260,658	€51.73	1,044,504
May, 2017	258,400	€55.15	1,302,904
June, 2017	254,000	€53.07	1,556,904
July, 2017	182,000	€52.24	1,738,904
August, 2017	258,618	€49.35	1,997,522
TOTAL	1,997,522	€50.06	

On September 22, 2017, ASMI announced a share buyback program to purchase up to an amount of €250 million of its own shares within the 2017-2018 time frame.

The following table provides a summary of shares repurchased by ASMI under this program:

PERIOD	TOTAL NUMBER OF SHARES PURCHASED	AVERAGE PRICE PAID PER SHARE (EUR)	CUMULATIVE NUMBER OF SHARES PURCHASED
Share buyback program 2017-2018:			
September, 2017	240,237	€52.44	240,237
October, 2017	823,362	€55.30	1,063,599
November, 2017	714,716	€60.32	1,778,315
December, 2017	863,338	€56.43	2,641,653
TOTAL	2,641,653	€56.77	

The following table provides the change in number of treasury shares and outstanding shares:

	TREASURY SHARES	OUTSTANDING SHARES
BALANCE AT BEGINNING OF YEAR	3,981,551	59,815,843
Purchase common shares	4,420,946	(4,420,946)
Exercise stock options out of treasury shares	(626,939)	626,939
Vesting restricted shares out of treasury shares	(118,317)	118,317
Cancellation treasury shares	(1,500,000)	–
BALANCE AT END OF YEAR	6,157,241	56,140,153

ASMI intends to use part of the shares for commitments under employee share-based compensation schemes.

The share buyback programs were executed by intermediaries through on-exchange purchases or through off-exchange trades. ASMI updated the markets on the progress of the share buyback programs on a weekly basis.

The repurchase programs are part of ASMI's commitment to use excess cash for the benefit of its shareholders.

TREASURY SHARES

On December 31, 2017, we had 56,140,153 outstanding common shares excluding 6,157,241 treasury shares. This compared to 59,815,843 outstanding common shares and 3,981,551 treasury shares at year-end 2016. Besides the cancellation of 1.5 million treasury shares in August 2017, the change in the number of treasury shares in 2017 was the result of approximately 4.4 million repurchased shares and approximately 745,000 treasury shares that were used as part of share based payments.

	2017
As per January 1:	
Issued shares	63,797,394
Treasury shares	3,981,551
Outstanding shares	59,815,843
Changes during the year:	
Cancellation of treasury shares	1,500,000
Share buybacks	4,420,946
Treasury shares used for share based performance programs	745,256
As per December 31:	
Issued shares	62,297,394
Treasury shares	6,157,241
Outstanding shares	56,140,153

RETAINED EARNINGS

Distributions to common shareholders are limited to the extent the total amount of shareholders' equity exceeds the amounts of nominal paid-in share capital (exclusive any share premium) and any reserves to be formed pursuant to law or the Company's Articles of Association. The amounts are derived from the Company financial statements of ASMI.

ASMI aims to pay a sustainable annual dividend. The Supervisory Board, upon proposal of the Management Board, will annually assess the amount of dividend that will be proposed to the AGM. The decision that a dividend be proposed to the AGM will be subject to the availability of distributable profits as well as retained earnings and may be affected by our potential future funding requirements. Accordingly, dividend payments may fluctuate and could decline or be omitted in any year.

In 2017, we paid a dividend of €0.70 per common share. We will propose to the forthcoming 2018 AGM to declare a dividend of €0.80 per share.

Results on dilution of investments in associates are accounted for directly in equity. For 2017 and 2016, these dilution results were €606 and €2,814 respectively.

OTHER RESERVES

The changes in the amount of other reserves are as follows:

	PROPORTIONATE SHARE IN OTHER COMPREHENSIVE INCOME INVEST- MENTS IN ASSOCIATES ¹⁾	REMEASUREMENT ON NET DEFINED BENEFIT	TRANSLATION RESERVE	TOTAL OTHER RESERVES
BALANCE				
JANUARY 1, 2016	(1,132)	-	191,895	190,763
Proportionate share in other comprehensive income investments in associates	(1,344)	-	-	(1,344)
Foreign currency translation effect on translation of foreign operations	-	-	40,069	40,069
BALANCE				
DECEMBER 31, 2016	(2,476)	-	231,964	229,488
Proportionate share other comprehensive income investments in associates	(2,580)	-	-	(2,580)
Remeasurement on net defined benefit	-	(264)	3	(261)
Foreign currency translation effect on translation of foreign operations	-	-	(172,893)	(172,893)
BALANCE				
DECEMBER 31, 2017	(5,056)	(264)	59,074	53,754

¹⁾ Proportionate share in other comprehensive income investments in associates and translation reserve, items may be subsequently reclassified to profit or loss.

NOTE 12. EMPLOYEE BENEFITS

PENSION PLANS

The Company has retirement plans covering substantially all employees. The principal plans are defined contribution plans, except for the plans of the Company's operations in the Netherlands and Japan.

Multi-employer plan

There are 141 eligible employees in the Netherlands. These employees participate in a multi-employer union plan (Pensioenfonds van de Metalektro PME) determined in accordance with the collective bargaining agreements effective for the industry in which we operate. This current collective bargaining agreement ends on May 31, 2018. This multi-employer union plan, accounted for as a defined contribution plan, covers approximately 1,300 companies and approximately 145,000 contributing members. Our contribution to the multi-employer union plan was less than five percent of the total contribution to the plan. The plan monitors its risks on a global basis, not by participating company or employee, and is subject to regulation by Dutch governmental authorities. By law (the Dutch Pension Act), a multi-employer union plan must be monitored against specific criteria, including the coverage ratio of the plan's assets to its obligations. As of January 1, 2015, new pension legislation has been enacted. This legislation results in amongst others, an increase of legally required coverage levels. The coverage percentage is calculated by dividing the funds capital by the total sum of pension liabilities and is based on actual market interest rates. The coverage ratio as per December 31, 2017 of 101.6% (December 31, 2016: 96.2%) is calculated giving consideration to the pension legislation and is below the legally required level. We have however no obligation to pay off any deficits the pension fund may incur, nor do we have any claim to any potential surpluses.

Every company participating in the PME contributes a premium calculated as a percentage of its total pensionable salaries, with each company subject to the same contribution rate. The premium can fluctuate yearly based on the coverage ratio of the multi-employer union plan, for 2017 the contribution percentage was 22.9%. The pension rights of each employee are based upon the employee's average salary during employment.

Our net periodic pension cost for this multi-employer union plan for any period is the amount of the required employer contribution for that period.

Defined benefit plan

The Company's employees in Japan participate in a defined benefit plan. The Company makes contributions to defined benefit plans in Japan that provide pension benefits for employees upon retirement. These are average-pay plans, based on the employees' years of service and compensation near retirement.

The most recent actuarial valuations of plan assets and the present value of the defined benefit obligation were carried out on December 31, 2017. The present value of the defined benefit obligation and the related current service cost and past service cost were measured using the projected unit credit method. Significant actuarial assumptions for the determination of the defined obligation are discount rate, future general salary increases and future pension increases.

The net liability of the plan developed as follows:

	DECEMBER 31,	
	2016	2017
Defined benefit obligations	11,403	10,167
Fair value of plan assets	9,985	9,781
NET LIABILITY FOR DEFINED BENEFIT PLANS	1,418	386

The changes in defined benefit obligations and fair value of plan assets are as follows:

	DECEMBER 31,	
	2016	2017
Defined benefit obligations		
BALANCE JANUARY 1	9,800	11,403
Current service cost	702	747
Interest on obligation	84	52
Remeasurement result	736	(147)
Benefits paid	(497)	(926)
Foreign currency translation effect	578	(962)
BALANCE DECEMBER 31	11,403	10,167
Fair value of plan assets		
BALANCE JANUARY 1	8,630	9,985
Interest income	80	48
Return on plan assets	(211)	454
Company contribution	1,473	1,102
Benefits paid	(497)	(926)
Foreign currency translation effect	510	(882)
BALANCE DECEMBER 31	9,985	9,781

The defined benefit cost consists of the following:

	DECEMBER 31,	
	2016	2017
Current service cost	702	747
Net interest costs	4	4
NET DEFINED BENEFIT COST	706	751
Reclassification to remeasurement	–	866
Remeasurement on net defined benefit for the year	–	(602)
REMEASUREMENT ON NET DEFINED BENEFIT	–	264
TOTAL DEFINED BENEFIT COST	706	1,015

The assumptions in calculating the actuarial present value of benefit obligations and net periodic benefit cost are as follows:

	2016	2017
Discount rate for defined benefit obligations	0.50%	0.50%
Discount rate for defined benefit cost	0.80%	0.50%

Assumptions regarding life expectancy are based on mortality tables published in 2014 by the Ministry of Health, Labour and Welfare of Japan.

The main risk on the pension plan relates to the discount rate. The defined benefit obligation is sensitive to a change in discount rates, a relative change of the discount rate of 25 basis points would have resulted in a change in the defined benefit obligation of 2.7%.

The allocation of plan assets is as follows:

	DECEMBER 31,			
	2016	2017		
Cash and cash equivalent	80	1%	95	1%
Equity Instruments	1,723	17%	1,827	19%
Debt instruments	950	10%	1,029	11%
Assets held by insurance company	7,232	72%	6,830	69%
TOTAL	9,985	100%	9,781	100%

The investment strategy is determined based on an asset-liability study in consultation with investment advisors and within the boundaries given by the regulatory bodies for pension funds.

Equity instruments consist primarily of publicly traded Japanese companies and common collective funds. Publicly traded equities are valued at the closing prices reported in the active market in which the individual securities are traded (level 1). Common collective funds are valued at the published price (level 1) per share multiplied by the number of shares held as of the measurement date. Debt instruments consists of government bonds and are valued at the closing prices in the active markets for identical assets (level 1). Assets held by insurance company consist of bonds and loans, government securities and common collective funds. Corporate and government securities are valued by third-party pricing sources (level 2). Common collective funds are valued at the net asset value per share (level 2) multiplied by the number of shares held as of the measurement date.

The plan assets do not include any of the Company's shares.

Retirement plan costs

ASMI contributed €1,102 to the defined benefit plan in 2017 (€1,473 in 2016). The Company expects to pay benefits for years subsequent to December 31, 2017 as follows:

	EXPECTED CONTRIBUTION DEFINED BENEFIT PLAN
2018	820
2019	366
2020	305
2021	355
2022	753
Aggregate for the years 2023-2027	3,130
TOTAL	5,729

The Company does not provide for any significant post-retirement benefits other than pensions.

MANAGEMENT BOARD AND EMPLOYEE AND LONG-TERM INCENTIVE PLAN

The Company has adopted various share plans (e.g. stock option plans, a restricted share plan and a performance share plan) and has entered into share agreements with the Management Board and various employees. Under the stock option plans, the Management Board and employees may purchase per the vesting date a specific number of shares of the Company's common stock at a certain price. Options are priced at market value in euros or US dollars on the date of grant. Under the restricted share plan, employees receive per the vesting date a specific number of shares of the Company's common stock. Under the performance share plan, the Management Board receives per the vesting date, and provided the performance criteria have been met, a specific number of shares of the Company's common stock.

Authority to issue options and shares

By resolution of the Annual General Meeting of Shareholders (AGM) of May 22, 2017, the formal authority to issue options and shares was allocated to the Management Board subject to the approval of the Supervisory Board. This authority is valid for 18 months and needs to be refreshed by the 2018 AGM to allow the continued application of the long-term incentive (LTI) plans beyond November 22, 2018.

The ASMI 2014 long-term incentive plan for employees (ELTI) is principally administered by the Management Board and the ASMI 2014 long-term incentive plan for members of the Management Board (MLTI) is principally administered by the Supervisory Board. This complies with applicable corporate governance standards. However, the Supervisory Board has no power to represent the Company. For external purposes the Management Board remains the competent body under both LTI plans. The LTI plans envisage that the Supervisory Board, or in the case of the ELTI the Management Board with the approval of the Supervisory Board, will determine the number of options and shares to be granted to the Management Board members and to employees.

2011 Long-Term Incentive Plan

In 2011 a stock option plan was adopted. In this plan to limit potential dilution, the amount of outstanding (vested and non-vested) options granted to the Management Board and to other employees will not exceed 7.5% of the issued ordinary share capital of ASMI. The stock option plan 2011 consists of two sub-plans: the ASMI stock option plan for employees (ESOP) and the ASMI stock option for members of the Management Board (MSOP).

For employees and existing Management Board members the grant date for all options granted is December 31 of the relevant year. In each of these situations, the three-year vesting period starts at the grant date. The exercise price in euros of all options issued under the ESOP and the MSOP is determined on the basis of the market value of the ASMI shares at (i.e. immediately prior to) the grant date.

The exercise period is four years starting at the third anniversary of the grant date.

The following table is a summary of changes in options outstanding under the 2011 and previous long-term incentive plan:

	EURO-PLANS		US DOLLAR-PLANS	
	NUMBER OF OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE IN €	NUMBER OF OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE IN US\$
BALANCE JANUARY 1, 2016	2,012,710	21.09	22,209	19.91
Options forfeited	(74,492)	23.73	(4,717)	29.69
Options expired	(4,128)	22.93	–	–
Options exercised	(638,958)	19.70	(16,493)	17.31
BALANCE DECEMBER 31, 2016	1,295,132	21.63	999	16.62
Options forfeited	–	–	–	–
Options expired	(2,179)	21.13	–	–
Options exercised	(626,444)	21.14	(999)	16.62
BALANCE DECEMBER 31, 2017	666,509	22.09	–	–

The total intrinsic value of options exercised was €13,293 for the year ended December 31, 2017 (2016: €12,882). In 2017 treasury shares have been sold for the exercise of 626,939 options.

On December 31, 2017, options outstanding and options exercisable classified by range of exercise prices are:

RANGE OF EXERCISE PRICES	OPTIONS OUTSTANDING			OPTIONS EXERCISABLE		
	NUMBER OUTSTANDING	WEIGHTED AVERAGE REMAINING CONTRACTUAL LIFE	WEIGHTED AVERAGE EXERCISE PRICE	NUMBER EXERCISABLE	WEIGHTED AVERAGE EXERCISE PRICE	
Euro plans						
€1.00-15.00	–	–	–	–	–	–
€15.01-20.00	195,346	1.0	18.93	195,346	18.93	
€20.01-25.00	471,163	2.6	23.40	471,163	23.40	
€1.00-25.00	666,509	2.1	22.09	666,509	22.09	

At December 31, 2017, the aggregate intrinsic value of all options outstanding and exercisable under these plans is €37,571.

Under these plans, no more options to purchase shares can be issued. Under the various stock option plans a total of 666,509 options to purchase common stock were outstanding at December 31, 2017, expiring at various dates through 2020.

2014 Long-Term Incentive Plan

In 2014 a new long-term incentive plan was adopted. In the new plan to limit potential dilution, the amount of outstanding (vested and non-vested) options and shares granted to the Management Board and to other employees will not exceed 5% of the issued ordinary share capital of ASMI. The new long-term incentive plan 2014 consists of two sub-plans: ELTI and the MLTI.

Options and performance shares are issued to Management Board members and restricted shares are issued to employees once per annum on the date following the publication of the first-quarter results of the relevant year. Possible grant to newly-hired employees can be issued once a quarter, on the date following the publication of the financial results of the relevant quarter. The number of options and shares outstanding under the long-term incentive plans or under any other plan or arrangement in aggregate may never exceed 5% of ASMI's share capital. In accordance with the ASMI remuneration policy, an exception is made for a transition period of four years, during which the dilution may exceed 5% but will not exceed 7.5%.

Performance and restricted shares outstanding

The following table is a summary of changes in performance shares and restricted shares outstanding under the 2014 long-term incentive plan.

	NUMBER OF PERFORMANCE SHARES	NUMBER OF RESTRICTED SHARES	STATUS	FAIR VALUE AT GRANT DATE (WEIGHTED AVERAGE)
BALANCE JANUARY 1, 2016	12,994	166,337		
Shares granted, employees	–	206,726	Unconditional	€35.36
Shares granted, Management Board	16,651	–	Conditional	€34.67
Shares vested	–	(55,041)		
Shares forfeited	–	(10,517)		
BALANCE DECEMBER 31, 2016	29,645	307,505		
Shares granted, employees	–	149,197	Unconditional	€52.29
Shares granted, Management Board	17,413	–	Conditional	€51.75
Shares vested	–	(118,317)		
Shares forfeited	–	(31,850)		
BALANCE DECEMBER 31, 2017	47,058	306,535		

In 2017, treasury shares were sold for the vesting of 118,317 restricted shares.

Options outstanding

The following table is a summary of changes in options outstanding under the 2014 long-term incentive plan.

	NUMBER OF OPTIONS	EXERCISE PRICE IN €	FAIR VALUE AT GRANT DATE
BALANCE JANUARY 1, 2015	–		
Options granted, April 24, 2015	42,659	44.24	€17.33
BALANCE DECEMBER 31, 2015	42,659		
Options granted, April 22, 2016	62,555	37.09	€12.64
BALANCE DECEMBER 31, 2016	105,214		
Options granted, April 21, 2017	24,963	51.55	€14.57
BALANCE DECEMBER 31, 2017	130,177		

The cost relating to stock options is measured at fair value on the grant date. The fair value for the stock options granted in 2017 was determined using the Black-Scholes option valuation model with the following weighted average assumptions:

	2017
Expected life (years)	7
Risk-free interest rate	1.36%
Dividend yield	1.86%
Expected volatility	32.58%
Exercise price	€51.55
Fair value per grant date	€14.57

The expected volatility measured at the standard deviation of continuously compounded share returns is based on statistical analysis of daily share prices over the last seven years.

At December 31, 2017, the aggregate intrinsic value of all options outstanding under the 2014 long-term incentive plan is €7,338.

Share-based payments expenses

The grant date fair value of the stock options, the restricted shares and the performance shares is expensed on a straight-line basis over the vesting period, based on the Company's estimate of stock options, restricted shares and performance shares that will eventually vest. The impact of the true up of the estimates is recognized in the Consolidated statement of profit or loss in the period in which the revision is determined. We recorded compensation expenses of €7,801 for 2017 (2016: €8,387).

NOTE 13. PROVISION FOR WARRANTY

The changes in the amount of provision for warranty are as follows:

	DECEMBER 31,	
	2016	2017
BALANCE JANUARY 1	9,023	5,800
Charged to cost of sales	3,576	9,682
Deductions	(4,065)	(7,361)
Releases of expired warranty	(2,906)	(1,108)
Foreign currency translation effect	172	(451)
BALANCE DECEMBER 31	5,800	6,562

Costs of warranty include the cost of labor and materials to repair a product during the warranty period. The main term of the warranty period is one year. The Company accrues for the estimated cost of the warranty on its products shipped in the provision for warranty, upon recognition of the sale of the product. The costs are estimated based on actual historical expenses incurred and on estimated future expenses related to current sales, and are updated periodically. Actual warranty costs are charged against the provision for warranty.

NOTE 14. ACCRUED EXPENSES AND OTHER PAYABLES

Accrued expenses and other payables consist of the following:

	DECEMBER 31,	
	2016	2017
Personnel-related items	24,051	29,456
Deferred revenue	9,389	9,879
Financing related items	1,175	5,146
Other	14,079	14,473
TOTAL ACCRUED EXPENSES AND OTHER PAYABLES	48,694	58,954

Personnel-related items comprise accrued management bonuses, accrued vacation days, accrued wage tax, social securities and pension premiums. Deferred revenue consists of the revenue relating to the undelivered elements of the arrangements. This part of revenue is deferred at their relative selling prices until delivery of these elements. Financing related items comprises the accrual for settlement of shares repurchased. Other includes accruals for VAT and other taxes and down payments from customers.

NOTE 15. CREDIT FACILITY

As per December 31, 2017, ASMI was debt-free. ASMI may borrow under separate short-term lines of credit with banks under an unsecured €150 million standby credit facility with a consortium of banks.

Total short-term lines of credit amounted to €150 million on December 31, 2017. The amount outstanding at December 31, 2017 was nil, so the undrawn portion totaled €150 million. The undrawn portion represents the Company's standby revolving credit facility of €150 million with a consortium of banks. The facility will be available through December 16, 2021, with an extension option for up to two years.

The credit facility of €150 million includes two financial covenants:

- › minimum consolidated tangible net worth; and
- › consolidated total net debt/total equity ratio.

These financial covenants are measured twice each year, at June 30 and December 31.

The minimum level of consolidated tangible net worth for the year ended December 31, 2017 required was €450 million, the consolidated tangible net worth as per that date was €1,462 million.

Consolidated tangible net worth is defined as the net assets, deducting any amount shown in respect of goodwill or other intangible assets (including any value arising from any valuation of ASMPT).

Total equity is defined as the aggregate of:

- › the amounts paid up on the issued common shares;
- › share capital in excess of par value;
- › retained earnings;
- › accumulated other comprehensive income and loss; and
- › deducting any amount shown in respect of goodwill or other intangible assets.

The net debt/total equity ratio should not exceed 1.5. For the year ended December 31, 2017, net cash was €836 million and total equity amounted to €2,012 million. The Company is in compliance with these financial covenants as of December 31, 2017.

ASMI does not provide guarantees for borrowings of ASMPT and there are no guarantees from ASMPT to secure indebtedness of ASMI. Under the rules of the Stock Exchange of Hong Kong, ASMPT is precluded from providing loans and advances other than trade receivables in the normal course of business, to ASMI or its non-ASMPT subsidiaries.

NOTE 16. FINANCIAL INSTRUMENTS AND FINANCIAL RISK MANAGEMENT

FINANCIAL INSTRUMENTS

Financial instruments include:

	DECEMBER 31,	
	2016	2017
Financial assets:		
Cash and cash equivalents	378,157	836,461
Accounts receivable	137,020	163,135
Financial liabilities:		
Accounts payable	60,910	79,349

The carrying amounts of cash and cash equivalents, accounts receivable and accounts payable equal their fair values because of the short-term nature of these instruments.

Gains or losses related to financial instruments are as follows:

	2016	2017
Interest income	3,095	1,683
Interest expense	(1,096)	(1,799)
Result from foreign currency exchange	13,032	(30,546)
Addition to allowance for doubtful accounts receivable	(52)	-

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. ASMI uses the following fair value hierarchy, which prioritizes the inputs to valuation techniques used to measure fair value into three levels and bases the categorization within the hierarchy upon the lowest level of input that is available and significant to the fair value measurement:

Level 1

Quoted prices in active markets that are accessible at the measurement date for identical assets and liabilities.

Level 2

Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3

Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

There were no transfers between levels during the years ended December 31, 2017 and December 31, 2016.

FINANCIAL RISK FACTORS

ASMI is exposed to a number of risk factors: market risks (including foreign exchange risk), credit risk, liquidity risk and equity price risk. The Company may use forward exchange contracts to hedge its foreign exchange risk. The Company does not enter into financial instrument transactions for trading or speculative purposes.

Foreign exchange risk

ASMI and its subsidiaries conduct business in a number of foreign countries, with certain transactions denominated in currencies other than the functional currency of the Company (Euro) or one of its subsidiaries conducting the business. The purpose of the Company's foreign currency management is to manage the effect of exchange rate fluctuations on income, expenses, cash flows and assets and liabilities denominated in selected foreign currencies, in particular denominated in US dollars.

We may use forward exchange contracts to hedge our foreign exchange risk of anticipated sales or purchase transactions in the normal course of business, which occur within the next twelve months, for which we have a firm commitment from a customer or to a supplier. The terms of these contracts are consistent with the timing of the transactions being hedged. The hedges related to forecasted transactions are designated and documented at the inception of the hedge as cash flow hedges, and are evaluated for effectiveness on a quarterly basis. The effective portion of the gain or loss on these hedges is reported as a component of accumulated other comprehensive

income (loss) net of taxes in equity, and is reclassified into earnings when the hedged transaction affects earnings.

Changes in the fair value of derivatives that do not qualify for hedge treatment, as well as the ineffective portion of any hedges, are recognized in earnings. We record all derivatives, including forward exchange contracts, on the statement of financial position at fair value in accrued expenses and payables. Should contracts extend beyond one year, these are classified as long-term.

Furthermore, we might manage the currency exposure of certain receivables and payables using derivative instruments, such as forward exchange contracts (fair value hedges) and currency swaps, and non-derivative instruments, such as debt borrowings in foreign currencies. The gains or losses on these instruments provide an offset to the gains or losses recorded on receivables and payables denominated in foreign currencies. The derivative instruments are recorded at fair value and changes in fair value are recorded in earnings under foreign currency exchange gains (losses) in the Consolidated statement of profit or loss. Receivables and payables denominated in foreign currencies are recorded at the exchange rate at the balance sheet date and gains and losses as a result of changes in exchange rates are recorded in earnings under foreign currency exchange gains (losses) in the consolidated statement of profit or loss.

We do not use forward exchange contracts for trading or speculative purposes. Financial assets and financial liabilities are recognized on the Company's Consolidated statement of financial position when the Company becomes a party to the contractual provisions of the instrument.

To the extent that exchange rate fluctuations impact the value of the Company's investments in its foreign subsidiaries, they are not hedged. The cumulative effect of these fluctuations is separately reported in consolidated equity. Reference is made to Note 11.

Per December 31, 2016 and December 31, 2017, there were no forward exchange contracts outstanding.

The following table analyzes the Company's sensitivity to a hypothetical 10% strengthening and 10% weakening of the US dollar, Singapore dollar, Korean won and Japanese yen against the euro as of December 31, 2016 and December 31, 2017. This analysis includes foreign currency-denominated monetary items and adjusts their translation at year end for a 10% increase and 10% decrease against the euro.

(EUR thousand)	IMPACT ON FINANCIAL INSTRUMENTS	
	2016	2017
10% increase of US dollar versus euro	36,166	35,843
10% decrease of US dollar versus euro	(36,166)	(35,843)
10% increase of Singapore dollar versus euro	276	(400)
10% decrease of Singapore dollar versus euro	(276)	400
10% increase of Korean won versus euro	1,409	2,760
10% decrease of Korean won versus euro	(1,409)	(2,760)
10% increase of Japanese yen versus euro	676	737
10% decrease of Japanese yen versus euro	(676)	(737)

A hypothetical 10% strengthening or 10% weakening of any other currency against the euro as of December 31, 2016 and December 31, 2017, would not result in a material impact on net earnings.

Interest risk

We are exposed to interest rate risk through our cash deposits. The Company does not enter into financial instrument transactions for trading or speculative purposes or to manage interest rate exposure. As per December 31, 2017, the Company had no debt and was not exposed to interest rate risk on borrowings.

Credit risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents, accounts receivable and derivative instruments. These instruments contain a risk of counterparties failing to discharge their obligations. We monitor credit risk and manage credit risk exposure by type of financial instrument by assessing the creditworthiness of counterparties. We do not anticipate non-performance by counterparties given their high creditworthiness.

Our customers are semiconductor device manufacturers located throughout the world. We perform ongoing credit evaluations of our customers' financial condition. We take additional measures

to mitigate credit risk when considered appropriate by means of down payments or letters of credit. We generally do not require collateral or other security to support financial instruments with credit risk.

Concentrations of credit risk (whether on- or off-balance sheet) that arise from financial instruments exist for groups of customers or counterparties when they have similar economic characteristics that would cause their ability to meet contractual obligations to be similarly affected by changes in economic or other conditions.

We derive a significant percentage of our revenue from a small number of large customers. The ten largest customers accounted for approximately 83.1% of net sales in 2017 (2016: 78.5%). Included in net sales are revenues of approximately €437 million (2016: €279 million) to customers contributing more than 10% of total net sales. Sales to these large customers also may fluctuate significantly from time to time depending on the timing and level of purchases by these customers. Significant orders from such customers may expose the Company to a concentration of credit risk and difficulties in collecting amounts due, which could harm the Company's financial results.

We invest our cash and cash equivalents in short-term deposits, money market funds and derivative instruments with high-rated financial institutions. We only enter into transactions with a limited number of major financial institutions that have high credit ratings and we closely monitor the creditworthiness of our counterparties. Concentration risk is mitigated by not limiting the exposure to a single counter party.

The maximum credit exposure is equal to the carrying values of cash and cash equivalent, and accounts receivable.

Liquidity risk

Our policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business.

Our liquidity needs are affected by many factors, some of which are based on the normal on-going operations of the business, and others that relate to the uncertainties of the global economy and the semiconductor industry. Although our cash requirements fluctuate based on the timing and extent of these factors, we believe that cash generated from operations, together with our principal sources of liquidity are sufficient to satisfy our current requirements, including our expected capital expenditures in 2018.

We intend to return cash to our shareholders on a regular basis in the form of dividend payments and, subject to our actual and anticipated liquidity requirements and other relevant factors, share buybacks.

The following table summarizes the Company's contractual and other obligations as at December 31, 2017.

	TOTAL	LESS THAN 1 YEAR	1-3 YEARS	3-5 YEARS	MORE THAN 5 YEARS
Accounts payable	79,349	79,349	–	–	–
Income tax payable	6,575	6,575	–	–	–
Accrued expenses and other payables	58,954	58,954	–	–	–
Operating leases	19,065	6,892	7,271	3,542	1,360
Pension liabilities	5,729	820	671	1,108	3,130
Purchase obligations:					
Purchase commitments to suppliers	111,627	107,793	3,790	27	17
Capital expenditure and other commitments	33,774	32,100	1,544	130	–
TOTAL CONTRACTUAL OBLIGATIONS	315,073	292,483	13,276	4,807	4,507

Total short-term lines of credit amounted to €150,000 at December 31, 2017. The amount outstanding at December 31, 2017 was nil and the undrawn portion totaled €150,000. The standby revolving credit facility of €150,000 with a consortium of banks will be available through December 16, 2021.

For the majority of purchase commitments, the Company has flexible delivery schedules depending on the market conditions, which allows the Company, to a certain extent, to delay delivery beyond originally planned delivery schedules.

Equity price risk

The shares of ASMPT, our 25.18% equity investment, are listed on the Hong Kong Stock Exchange. If the fair value of an investment is less than its carrying value at the balance sheet date, the Company determines whether the impairment is temporary or prolonged. The amount per share recognized as per December 31, 2017 under equity accounting amounts to HK\$66.47, whereas the level 1 fair value per share (being the market price of a share on the Hong Kong Stock Exchange) was HK\$108.90. Management concluded that, based on quantitative analysis no impairment of its share in ASMPT existed as per December 31, 2017.

NOTE 17. COMMITMENTS AND CONTINGENCIES

On December 31, 2017, operating leases having initial or remaining non-cancelable terms in excess of one year are as follows:

	2016	2017
Not later than 1 year	6,365	6,892
Between 1 and 5 years	9,832	10,813
Later than 5 years	326	1,360
TOTAL	16,523	19,065

Operating lease obligations include leases of equipment and facilities. Lease payments recognized as an expense were €7,179 for the year ended December 31, 2017 (2016: €6,913). Per December 31, 2017, the Company had entered into purchase commitments with suppliers in the amount of €107,793 for purchases within the next 12 months. Commitments for capital expenditures and other commitments per December 31, 2017 were €32,100 within the next 12 months.

CHANGE OF CONTROL TRANSACTION

Pursuant to our 1997 settlement agreement with Applied Materials, as amended and restated in 1998, if we desire to effect a change of control transaction, as defined in the settlement agreement which generally involves our operations and not our investment in ASMPT, with a competitor of Applied Materials, we must first offer the change of control transaction to Applied Materials on the same terms as we would be willing to accept from that competitor pursuant to a bona fide arm's-length offer made by that competitor.

NOTE 18. LITIGATION

ASMI is a party to various legal proceedings incidental to its business. As is the case with other companies in similar industries, the Company faces exposure from actual or potential claims and legal proceedings. Although the ultimate result of legal proceedings cannot be predicted with certainty, it is the opinion of the Company's management that the outcome of any claim which is pending, either individually or on a combined basis, will not have a material effect on the financial position of the Company, its cash flows and result of operations.

In 2007, ASMI licensed Hitachi Kokusai under certain of its patents in the field of Atomic Layer Deposition. The license agreement was renewed in 2012.

On August 30, 2017, ASMI initiated an arbitration with the American Arbitration Association against Hitachi Kokusai for breach of the license agreement between the parties. At this point of time it is unpredictable when the arbitration will be completed.

Following the expiration of the parties' patent license agreement, ASMI filed, on December 1, 2017, a suit for patent infringement against Hitachi Kokusai and its US subsidiary in the US District Court for the Northern District of California. ASMI has asserted infringement of three of its patents and is seeking both an injunction and monetary damages.

Hitachi Kokusai subsequently filed suit on December 1, 2017 for alleged patent infringement against ASMI in the US District Court for the Northern District of California. Hitachi Kokusai has asserted seven patents and also seeks an injunction and monetary damages. No specific monetary amount has been requested to date.

Thereafter, on February 20, 2018, Hitachi Kokusai initiated litigation in the District of Oregon asserting four patents against ASMI. ASMI is evaluating the allegations in the Oregon action.

More information on risk categories and factors is provided on page 58.

NOTE 19. SEGMENT DISCLOSURE

The Company organizes its activities in two operating segments, Front-end and Back-end. Operating segments are reported in a manner consistent with the internal reporting provided to the Chief Executive Officer (CEO), which is the Chief Operating Decision Maker (CODM).

The Front-end segment manufactures and sells equipment used in wafer processing, encompassing the fabrication steps in which silicon wafers are layered with semiconductor devices. The segment is a product-driven organizational unit comprised of manufacturing, service, and sales operations in Europe, the United States, Japan, South Korea and Southeast Asia.

The Back-end segment manufactures and sells equipment and materials used in assembly and packaging, encompassing the processes in which silicon wafers are separated into individual circuits and subsequently assembled, packaged and tested. The segment is organized in ASM Pacific Technology Ltd, in which the Company holds a substantial share of 25.18% interest, whilst the remaining shares are listed on the Stock Exchange of Hong Kong. The segment's main operations are located in Hong Kong, the People's Republic of China, Singapore, Malaysia and Germany.

The Back-end segment remains reported as a separate segment since the cease of control per March 15, 2013. Since that date, the segment is reported as an equity method investment as the CEO reviews this information as part of his CODM package.

Accordingly, the asset and result information regarding the operations that comprise the segment are disclosed. The full financial results are reviewed by the CODM, the external reporting of the segment are on an equity method investment basis. The total of all segments' financial amounts are reconciled to the corresponding amounts reported in the Consolidated financial statements, eliminations are reflected in the reconciling column for amounts reported in excess of those amounts reflected in the Consolidated financial statements.

	YEAR ENDED DECEMBER 31, 2016			
	FRONT-END	BACK-END 100%	DECONSOLIDATED	TOTAL
Net sales	597,930	1,666,859	(1,666,859)	597,930
Gross profit	264,500	626,717	(626,717)	264,500
Result from operations	82,241	231,794	(231,794)	82,241
Interest income	3,095	–	–	3,095
Interest expense	(1,096)	(22,055)	22,055	(1,096)
Foreign currency exchange gains (losses), net	13,032	–	–	13,032
Result on investments in associates	–	–	40,488	40,488
Income tax expense	(2,289)	(41,477)	41,477	(2,289)
Net earnings (loss)	94,983	168,262	(127,774)	135,471
Cash flows from operating activities	91,412	229,000	(229,000)	91,412
Cash flows from investing activities	(60,094)	(123,336)	145,419	(38,011)
Cash flows from financing activities	(125,798)	(65,054)	65,054	(125,798)
Cash and cash equivalents	378,157	261,629	(261,629)	378,157
Goodwill	11,270	52,359	(52,359)	11,270
Other intangible assets	100,179	69,909	(69,909)	100,179
Investments in associates	–	–	1,218,024	1,218,024
Other identifiable assets	422,919	1,529,060	(1,529,060)	422,919
Total assets	912,525	1,912,957	(694,933)	2,130,549
Total debt	–	315,590	(315,590)	–
Headcount ¹⁾	1,670	14,360	(14,360)	1,670

¹ Headcount includes employees with a fixed contract, and excludes temporary workers.

	YEAR ENDED DECEMBER 31, 2017			
	FRONT-END	BACK-END 100%	DECONSOLIDATED	TOTAL
Net sales	737,401	1,993,734	(1,993,734)	737,401
Gross profit	305,895	802,305	(802,305)	305,895
Result from operations	113,187	389,046	(389,046)	113,187
Interest income	1,683	3,532	(3,532)	1,683
Interest expense	(1,799)	(18,488)	18,488	(1,799)
Foreign currency exchange gains (losses), net	(30,546)	(1,542)	1,542	(30,546)
Result on investments in associates	–	–	89,614	89,614
Result from sale of ASML shares	–	–	284,898	284,898
Income tax expense	(4,635)	(54,453)	54,453	(4,635)
Net earnings (loss)	77,890	318,095	56,417	452,402
Cash flows from operating activities	116,060	184,447	(184,447)	116,060
Cash flows from investing activities	606,304	20,694	15,764	642,762
Cash flows from financing activities	(267,865)	(159,690)	159,690	(267,865)
Cash and cash equivalents	836,461	252,443	(252,443)	836,461
Goodwill	11,270	43,608	(43,608)	11,270
Other intangible assets	113,295	57,842	(57,842)	113,295
Investments in associates	–	–	730,552	730,552
Other identifiable assets	485,624	1,630,749	(1,630,749)	485,624
Total assets	1,446,650	1,984,642	(1,254,090)	2,177,202
Total debt	–	258,462	(258,462)	–
Headcount ¹⁾	1,900	16,400	(16,400)	1,900

¹⁾ Headcount includes employees with a fixed contract, and excludes temporary workers.

The accounting policies used to measure the net earnings and total assets in each segment are consistent to those used in the Consolidated financial statements. The measurement methods used to determine reported segment earnings are consistently applied for all periods presented. There were no asymmetrical allocations to segments.

Geographical information is summarized as follows:

(EUR thousand)	YEAR ENDED DECEMBER 31,	
	2016	2017
United States	€145,119	€38,648
Europe	113,833	7,148
Asia	338,978	49,208
	€597,930	€95,004
	€737,401	€106,632

For geographical reporting, net sales are attributed to the geographical location in which the customer's facilities are located.

NOTE 20. INCOME TAXES

The components of income before income taxes consist of:

	YEAR ENDED DECEMBER 31,	
	2016	2017
The Netherlands	77,645	381,618
Other countries	60,115	75,419
INCOME BEFORE INCOME TAXES		
	137,760	457,037

The income tax expense consists of:

	YEAR ENDED DECEMBER 31,	
	2016	2017
Current:		
The Netherlands	(959)	(1,666)
Other countries	(2,221)	(5,651)
	(3,180)	(7,317)
Deferred:		
The Netherlands	–	2,812
Other countries	891	(130)
	(2,289)	(4,635)
INCOME TAX (EXPENSE) BENEFIT		

The provisions for income taxes as shown in the Consolidated statements of profit or loss differ from the amounts computed by applying the Dutch statutory income tax rate to earnings before taxes. A reconciliation of the provisions for income taxes and the amounts that would be computed using the Dutch statutory income tax rate is set forth as follows:

	YEAR ENDED DECEMBER 31,			
	2016	2017	2016	2017
EARNINGS BEFORE INCOME TAXES FROM CONTINUING OPERATIONS	137,760	100.0%	457,037	100.0%
Income tax provision based on Dutch statutory income tax rate	(34,440)	25.0%	(114,259)	25.0%
Non-deductible expenses	(3,044)	2.2%	(2,998)	0.7%
Foreign taxes at a rate other than the Dutch statutory rate	(315)	0.2%	(885)	0.2%
Recognition of net operating losses	692	(0.5%)	(2,905)	0.6%
Utilization of net operating losses, previously not recognized	12,192	(8.9%)	4,394	(1.0%)
Non-taxable income ¹⁾	11,819	(8.6%)	102,450	(22.4%)
Adjustments in respect of prior years' current taxes	1,935	(1.4%)	(161)	-
Other ²⁾	8,872	(6.4%)	9,729	(2.1%)
TAX INCOME / (EXPENSE)	(2,289)	1.7%	(4,635)	1.0%

¹⁾ Non-taxable income mainly consists of revenues deriving from the share in income of investments and associates which are exempted under the Dutch participation exemption.

²⁾ Other mainly consists of tax credits, withholding taxes, changes in (enacted) tax laws and revaluation of certain assets.

On June 8, 2009, the Singapore Economic Development Board (EDB) granted a Pioneer Certificate to ASM Front-end Manufacturing Singapore Pte Ltd (FEMS), a principal subsidiary of the Group, to the effect that profits arising from certain manufacturing activities by FEMS of Front-end equipment will in principle be exempted from tax for a period of 10 years effective from July 1, 2008, subject to fulfillment of certain criteria during the period.

Since 2011 the Dutch statutory tax rate is 25%. Taxation for other jurisdictions is calculated at the rates prevailing in the relevant jurisdictions. The Company's deferred tax assets and liabilities have been determined in accordance with these statutory income tax rates.

Deferred income taxes consist of the following:

	JANUARY 1, 2016	CONSOLIDATED STATEMENT OF PROFIT OR LOSS	EQUITY	EXCHANGE DIFFERENCES	DECEMBER 31, 2016
Deferred tax assets:					
Reserves and allowances	1,911	95	-	128	2,134
Depreciation	2,353	386	-	117	2,856
Recognition net operating losses	6,545	692	-	20	7,257
Other	754	925	-	(7)	1,672
DEFERRED TAX ASSETS	11,563	2,098	-	258	13,919
Deferred tax liabilities:					
Capitalized development expenses	(11,282)	(1,207)	-	(581)	(13,070)
Other	(50)	-	-	2	(48)
DEFERRED TAX LIABILITIES	(11,332)	(1,207)	-	(579)	(13,118)
NET DEFERRED INCOME TAXES	231	891	-	(321)	801

	JANUARY 1, 2017	CONSOLIDATED STATEMENT OF PROFIT OR LOSS	EQUITY	EXCHANGE DIFFERENCES	DECEMBER 31, 2017
Deferred tax assets:					
Reserves and allowances	2,134	(169)	366	(30)	2,301
Depreciation	2,856	4,156	-	(261)	6,751
Recognition net operating losses	7,257	(2,771)	-	(60)	4,426
Other	1,672	3,153	-	(187)	4,638
DEFERRED TAX ASSETS	13,919	4,369	366	(538)	18,116
Deferred tax liabilities:					
Capitalized development expenses	(13,070)	(1,737)	-	943	(13,864)
Other	(48)	50	-	(2)	-
DEFERRED TAX LIABILITIES	(13,118)	(1,687)	-	941	(13,864)
NET DEFERRED INCOME TAXES	801	2,682	366	403	4,252

Based on tax filings, ASMI and its individual subsidiaries have net operating losses available at December 31, 2017 of €114,341 to reduce future income taxes, mainly in the Netherlands. The Company believes that realization of its net deferred tax assets is dependent on the ability of the Company to generate taxable income in the future. Given the volatile nature of the semiconductor equipment industry, past experience, and the tax jurisdictions where the Company has net operating losses, the Company believes that there is currently sufficient evidence to recognize a deferred tax asset in the amount of €4,426. Deferred tax assets for temporary differences are recognized in the Netherlands, United States, Japan, South Korea and Singapore.

The amounts and expiration dates of the net operating losses for tax purposes are as follows:

EXPIRATION YEAR	TOTAL OF NET OPERATING LOSSES FOR TAX PURPOSES	NET OPERATING LOSSES FOR TAX PURPOSES THE NETHERLANDS	NET OPERATING LOSSES FOR TAX PURPOSES OTHER COUNTRIES
2019	13,345	13,345	-
2020	204	-	204
2021	58,478	58,478	-
2022	26,815	26,815	-
2023	16	-	16
2026	11,456	11,456	-
2030	1,585	-	1,585
2035	2,442	-	2,442
TOTAL	114,341	110,094	4,247

The Company has not provided for deferred foreign withholding taxes, if any, on undistributed earnings of its foreign subsidiaries. At December 31, 2017, the undistributed earnings of subsidiaries, subject to withholding taxes, were approximately €39,375. These earnings could become subject to foreign withholding taxes if they were remitted as dividends and/or if the Company should sell its interest in the subsidiaries.

A summary of open tax years by major jurisdiction is as follows:

JURISDICTION

Japan	2013-2017
The Netherlands	2014-2017
Singapore	2013-2017
United States of America	1998-2017
South Korea	2012-2017

The calculation of the Company's tax liabilities involves dealing with uncertainties in the application of complex tax laws. The Company's estimate for the potential outcome of any unrecognized tax benefits is highly judgmental. Settlement of unrecognized tax benefits in a manner inconsistent with the Company's expectations could have a material impact on the Company's financial position, net earnings and cash flows. The Company is subject to tax audits in its major tax jurisdictions, and local tax authorities may challenge the positions taken by the Company.

NOTE 21. SELECTED OPERATING EXPENSES AND ADDITIONAL INFORMATION

Personnel expenses for employees were as follows:

	DECEMBER 31,	
	2016	2017
Wages and salaries	119,438	142,141
Social security	14,239	14,131
Pension expenses	5,544	5,931
Share-based payment expenses	8,387	7,801
Restructuring expenses	3,132	782
TOTAL	150,740	170,786

Personnel expenses are included in cost of sales and in operating expenses in the Consolidated statement of profit or loss.

The number of employees, exclusive of temporary workers, by geographical area at year-end was as follows:

GEOGRAPHICAL LOCATION	DECEMBER 31,	
	2016	2017
Europe:		
– the Netherlands	141	143
– EMEA	162	171
United States	535	555
Japan	212	228
South Korea	157	221
Singapore	340	395
Asia, other	123	187
TOTAL	1,670	1,900

The number of employees, exclusive of temporary workers, by function at year-end was as follows:

PER FUNCTION	DECEMBER 31,	
	2016	2017
Research and development	447	497
Manufacturing	296	361
Marketing and sales	252	268
Customer service	506	597
Finance and administration	169	177
TOTAL	1,670	1,900

NOTE 22. RESEARCH AND DEVELOPMENT

Research and development consists of the following:

	YEAR ENDED DECEMBER 31,	
	2016	2017
Research and development expenses	101,536	114,093
Capitalization of development expenses	(26,484)	(38,615)
Amortization of capitalized development expenses	13,345	13,288
Research and development grants and credits	(843)	(326)
TOTAL RESEARCH AND DEVELOPMENT EXPENSES	87,554	88,440
Impairment of research and development related assets	3,575	4,337
TOTAL	91,129	92,777

The impairment expenses in 2016 and 2017 related to customer specific projects.

The Company's operations in the Netherlands, Belgium and the United States receive research and development grants and credits from various sources.

NOTE 23. EARNINGS PER SHARE

Basic net earnings per common share is calculated by dividing net income attributable to common shareholders by the weighted average number of common shares outstanding for that period. The dilutive effect is calculated using the treasury stock method. The calculation of diluted net income per share assumes the exercise of options issued under our stock option plans (and the issuance of shares under our share plans) for periods in which exercises (or issuances) would have a dilutive effect. The calculation of diluted net income per share does not assume exercise of options (or issuance of shares) when such exercises (or issuances) would be anti-dilutive.

The calculation of basic and diluted net income per share attributable to common shareholders is based on the following data:

	DECEMBER 31,	
	2016	2017
Net earnings used for purposes of calculating net income per common share		
NET EARNINGS FROM OPERATIONS	135,471	452,402
Basic weighted average number of shares outstanding during the year (thousands)	60,616	58,573
Effect of dilutive potential common shares from stock options and restricted shares	637	752
DILUTIVE WEIGHTED AVERAGE NUMBER OF SHARES OUTSTANDING	61,253	59,325
Basic net earnings per share:		
from operations	2.23	7.72
Diluted net earnings per share:		
from operations	2.21	7.63

NOTE 24. BOARD REMUNERATION

The remuneration of members of the Management Board has been determined by the Supervisory Board.

During 2017, the Company considered the members of the Management Board and the Supervisory Board to be the key management personnel. Total remuneration for key management personnel in 2017 amounts to €3,637 (2016: €3,315).

The following table sets information concerning all remuneration from the Company (including its subsidiaries) for services in all capacities to all current members of the Management Board of the Company:

	BASE COMPENSATION	BONUSES	PENSIONS	SHARE-BASED PAYMENT EXPENSES ¹⁾	FRINGE BENEFITS	TOTAL
Management Board:						
C.D. del Prado						
2017	637	549	111	785	65	2,147
2016	607	398	97	750	63	1,915
P.A.M. van Bommel						
2017	416	289	85	398	47	1,235
2016	408	204	68	435	40	1,155

¹⁾ These amounts represent the vesting expenses related to the financial year.

SHORT-TERM INCENTIVE (CASH BONUS)

Each year, a short-term incentive can be earned, based on achieving specific challenging targets. These targets are based for 75% on company financial targets and for 25% on non-financial targets. The on-target bonus percentage for the CEO is 100% of base salary, with a maximum pay-out of 150% of base salary. The on-target bonus percentage for the other members of the Management Board is 75% of base salary, with a maximum pay-out of 125% of base salary. For the year 2017, the Management Board partially met the company financial targets and met the non-financial targets.

LONG-TERM INCENTIVE (STOCK OPTIONS/PERFORMANCE SHARES)

The members of the Management Board are eligible to receive stock options and performance shares under the ASMI 2014 long-term incentive plan for members of the Management Board in order to focus on the long-term interest of the company. Stock options vest after three years subject to continued employment and expire after seven years. Performance shares vest after three years subject to meeting certain conditions. The members of the Management Board are required to hold the vested performance shares for an additional two years; however, they are allowed to sell a part of the unconditional shares after three years for tax purposes. The next grant of stock options and restricted shares will take place in April 2018.

PENSION ARRANGEMENT

As of 2015, the members of the Management Board no longer participate in the industry wide pension fund. They are offered participation in a defined contribution plan for their salary up to €103,317.

For their salary above €103,317, the members of the Management Board are compensated with an amount equal to the employer pension contribution. The members of the Management Board have the option to participate in a net pension plan offered by the company or to have the compensation paid out in cash.

FRINGE BENEFITS

Fringe benefits cover compensation related to the use of a (company) car, a representation and expense allowance, social security premium and premium for health and disability insurance.

OUTSTANDING OPTIONS

The following table shows the outstanding options to purchase ASMI common shares held by current members of the Management Board, and changes in such holdings during 2017:

	YEAR OF GRANT	OUTSTANDING JANUARY 1, 2017	GRANTED IN 2017	EXERCISED IN 2017 ³⁾	OUTSTANDING DECEMBER 31, 2017	EXERCISE PRICE	END DATE
C.D. del Prado ¹⁾	2009	58,967	–	(58,967)	–	€ 12.79	Nov 30, 2017
C.D. del Prado ²⁾	2011	88,450	–	–	88,450	€ 18.93	Dec 31, 2018
C.D. del Prado ²⁾	2012	70,760	–	–	70,760	€ 22.93	Dec 31, 2019
C.D. del Prado ²⁾	2013	75,000	–	–	75,000	€ 23.73	Dec 31, 2020
C.D. del Prado ²⁾	2015	28,050	–	–	28,050	€ 44.24	Apr 24, 2022
C.D. del Prado ²⁾	2016	41,589	–	–	41,589	€ 37.09	Apr 22, 2023
C.D. del Prado ²⁾	2017	–	16,757	–	16,757	€ 51.55	Apr 21, 2024
P.A.M. van Bommel ²⁾	2010	29,483	–	(29,483)	–	€ 13.80	July 1, 2017
P.A.M. van Bommel ²⁾	2011	62,504	–	–	62,504	€ 18.93	Dec 31, 2018
P.A.M. van Bommel ²⁾	2012	47,173	–	–	47,173	€ 22.93	Dec 31, 2019
P.A.M. van Bommel ²⁾	2013	53,000	–	–	53,000	€ 23.73	Dec 31, 2020
P.A.M. van Bommel ²⁾	2015	14,609	–	–	14,609	€ 44.24	Apr 24, 2022
P.A.M. van Bommel ²⁾	2016	20,966	–	–	20,966	€ 37.09	Apr 22, 2023
P.A.M. van Bommel ²⁾	2017	–	8,206	–	8,206	€ 51.55	Apr 21, 2024
TOTAL		590,551	24,963	(88,450)	527,064		

¹ Options are granted for a term of eight years, and become exercisable after a three year vesting period.

² Options are granted for a term of seven years and become exercisable after a three year vesting period.

³ Options of C.D. del Prado were exercised on November 28, 2017 at a share price of €60.53 and options of P.A.M. van Bommel were exercised on April 25, 2017 at a share price of €55.22.

The fair value of options granted to current members of the Management Board was €14.57 in 2017.

In 2017, 88,450 options to purchase ASMI common shares were exercised and 88,450 treasury shares were sold for the exercise of these options.

OUTSTANDING PERFORMANCE SHARES

The following table shows the outstanding performance shares granted to members of the Management Board in 2017 and held by members of the Management Board per December 31, 2017:

	GRANT DATE	STATUS	NUMBER OF SHARES AT GRANT DATE	FAIR VALUE AT GRANT DATE	VESTING DATE
C.D. del Prado	April 24, 2015	Conditional	8,544	€43.21	April 24, 2018
P.A.M. van Bommel	April 24, 2015	Conditional	4,450	€43.21	April 24, 2018
C.D. del Prado	April 22, 2016	Conditional	11,070	€34.67	April 22, 2019
P.A.M. van Bommel	April 22, 2016	Conditional	5,581	€34.67	April 22, 2019
C.D. del Prado	April 21, 2017	Conditional	11,689	€51.75	April 21, 2020
P.A.M. van Bommel	April 21, 2017	Conditional	5,724	€51.75	April 21, 2020

The shares will become unconditional after three years, depending on the achievement of predetermined targets. The financial targets to be achieved are measured over a three-year performance period and relate to a sales growth compared to market and an average EBIT percentage performance measure. The Management Board members will hold the unconditional shares for at least an additional two years; however, they are allowed to sell a part of the unconditional shares after three years for tax purposes.

The following table sets forth information concerning all remuneration (base compensation, no bonuses or pensions were paid) from the Company (including its subsidiaries) for services in all capacities to all current and former members of the Supervisory Board of the Company:

	YEAR ENDED DECEMBER 31,	
	2016	2017
Supervisory Board:		
J.C. Lobbezoo	70.0	70.0
J.M.R. Danneels ¹⁾	20.0	-
H.W. Kreutzer	52.5	52.5
M.C.J. van Pernis	52.5	52.5
U.H.R. Schumacher	50.0	50.0
S. Kahle-Galonske ²⁾	-	30.5
TOTAL	245.0	255.5

¹ Period January 1 to May 25, 2016

² Period as of May 22, 2017

The remuneration of members of the Supervisory Board has been determined by the Annual General Meeting of Shareholders.

No stock options or performance shares have been granted to members of the Supervisory Board.

NOTE 25. SHARE OWNERSHIP AND RELATED PARTY TRANSACTIONS

The ownership or controlling interest of outstanding common shares of ASMI by members of the Management Board and Supervisory Board or members of their immediate family are as follows:

	DECEMBER 31, 2016		DECEMBER 31, 2017	
	SHARES OWNED	PERCENTAGE OF COMMON SHARES OUTSTANDING	SHARES OWNED	PERCENTAGE OF COMMON SHARES OUTSTANDING
C.D. del Prado (member of the Management Board)	896,437	1.50%	918,684	1.64%

The Company has a related party relationship with its subsidiaries, equity accounted investees and members of the Supervisory Board and the Management Board. Related party transactions, if any, are conducted on an at arm's length basis with terms comparable to transactions with third parties.

NOTE 26. PRINCIPLE AUDITOR'S FEES AND SERVICES

KPMG Accountants NV has served as our external auditor for the years 2017 and 2016. The table sets out the aggregate fees for professional audit services and other services rendered by the external auditors and its member firms and/or affiliates in 2017 and 2016. The fees mentioned in the table for the audit of the financial statements 2017 (2016) relate to the total fees for the audit of the financial statements 2017 (2016), irrespective of whether the activities have been performed during the financial year 2017 (2016). The following fees were charged by KPMG Accountants N.V. to the company, its subsidiaries and other consolidated companies, as referred to in Section 2:382a(1) and (2) of the Dutch Civil Code.

	2016			2017		
	KPMG ACCOUNTANTS NV	KPMG NETWORK	KPMG TOTAL	KPMG ACCOUNTANTS NV	KPMG NETWORK	KPMG TOTAL
Audit fees	370	95	465	515	125	640
Audit-related fees	30	–	30	–	–	–
Tax fees	–	–	–	–	–	–
Other fees	–	–	–	–	–	–
TOTAL	400	95	495	515	125	640

AUDIT COMMITTEE PRE-APPROVAL POLICIES

The Audit Committee has determined that the provision of services by KPMG described in the preceding paragraphs is compatible with maintaining KPMG's independence. All audit and permitted non-audit services provided by KPMG during 2017 were pre-approved by the Audit Committee.

The Audit Committee has adopted the following policies and procedures for pre-approval of all audit and permitted non-audit services provided by our external auditor:

Audit services

Management submits to the Audit Committee for pre-approval the scope and estimated fees for specific services directly related to performing the independent audit of our Consolidated financial statements for the current year.

Audit-related services

The Audit Committee may pre-approve expenditures up to a specified amount for services included in identified service categories that are related extensions of audit services and are logically performed by the auditors. Additional services exceeding the specified pre-approved limits require specific Audit Committee approval.

Tax services

The Audit Committee may pre-approve expenditures up to a specified amount per engagement and in total for identified services related to tax matters. Additional services exceeding the specified pre-approved limits, or involving service types not included in the pre-approved list, require specific Audit Committee approval.

Other services

In the case of specified services for which utilizing our external auditor creates efficiencies, minimizes disruption, or preserves confidentiality, or for which management has determined that our external auditor possesses unique or superior qualifications to provide such services, the Audit Committee may pre-approve expenditures up to a specified amount per engagement and in total. Additional services exceeding the specified pre-approved limits, or involving service types not included in the pre-approved list, require specific Audit Committee approval.

NOTE 27. SUBSEQUENT EVENTS

Subsequent events were evaluated up to March 16, 2018, which is the issuance date of this Annual Report 2017. There are no subsequent events to report.

NOTE 28. OTHER CURRENT ASSETS

Other current assets consist of the following:

	DECEMBER 31,	
	2016	2017
Prepayments	10,277	8,322
VAT receivable	5,959	5,650
Amounts to be invoiced	3,536	4,132
Other current assets	3,077	961
TOTAL	22,849	19,065

NOTE 29. CORRECTION OF ERRORS

Correction of errors

During 2017, the Company discovered that the dilution effect was erroneously not included for the goodwill and other intangible assets of the associate ASMPT. As a consequence, the value of the investment in associate was overstated. The errors have been corrected by restating each of the affected financial statement line items for prior periods.

The following table summarizes the impact.

Consolidated Statement of Financial Position

	JANUARY 1, 2016		
	AS PREVIOUSLY REPORTED	ADJUSTMENTS	AS RESTATED
INVESTMENTS IN ASSOCIATES	1,180,839	(10,530)	1,170,309
Others	895,138	—	895,138
TOTAL ASSETS	2,075,977	(10,530)	2,065,447
EQUITY	1,948,379	(10,530)	1,937,849
Liabilities	127,598	—	127,598
TOTAL EQUITY & LIABILITIES	2,075,977	(10,530)	2,065,447

	DECEMBER 31, 2016		
	AS PREVIOUSLY REPORTED	ADJUSTMENTS	AS RESTATED
INVESTMENTS IN ASSOCIATES	1,235,738	(17,714)	1,218,024
Others	912,525	—	912,525
TOTAL ASSETS	2,148,263	(17,714)	2,130,549
EQUITY	2,015,856	(17,714)	1,998,142
Liabilities	132,407	—	132,407
TOTAL EQUITY & LIABILITIES	2,148,263	(17,714)	2,130,549

SIGNING

Almere

March 16, 2018

SUPERVISORY BOARD

J.C. Lobbezoo

H.W. Kreutzer

M.C.J. van Pernis

U.H.R. Schumacher

S. Kahle-Galonske

MANAGEMENT BOARD

C.D. del Prado

P.A.M. van Bommel

COMPANY BALANCE SHEET

(before proposed appropriation of net earnings for the year)

(EUR thousand)	NOTES	DECEMBER 31, 2016	2017
Non-current assets			
Property, plant and equipment, net	5	191	339
Goodwill, net	4	11,270	11,270
Other intangible assets, net	3	13,584	13,841
Investments in subsidiaries	2	1,801,500	1,373,070
Loans to subsidiaries	2	54,877	46,863
Other non-current assets		809	754
Deferred tax assets	6	5,000	7,812
TOTAL NON-CURRENT ASSETS		1,887,231	1,453,949
Current assets			
Loans to subsidiaries	2	–	1,892
Amounts due from subsidiaries		6,196	880
Other current assets		755	827
Cash and cash equivalents		111,984	568,185
TOTAL CURRENT ASSETS		118,935	571,784
TOTAL ASSETS		2,006,166	2,025,733
Equity			
Common shares		2,552	2,492
Capital in excess of par value		225,837	218,525
Treasury shares		(151,477)	(304,654)
Legal reserves			
Translation reserve		229,488	53,754
Other legal reserves		1,291,445	778,608
Accumulated net earnings		264,826	810,385
Net earnings current year		135,471	452,402
TOTAL EQUITY	7	1,998,142	2,011,512
Current liabilities			
Accounts payable		2,299	1,320
Amounts due to subsidiaries		2,104	1,052
Accrued expenses and other payables	8	3,621	11,849
TOTAL CURRENT LIABILITIES		8,024	14,221
TOTAL EQUITY AND LIABILITIES		2,006,166	2,025,733

COMPANY STATEMENT OF PROFIT OR LOSS

(EUR thousand)	YEAR ENDED DECEMBER 31,	
	2016	2017
Operating expenses:		
Selling, general and administrative	(24,911)	(25,406)
Research and development	(1,056)	(2,038)
TOTAL OPERATING EXPENSES	(25,967)	(27,444)
RESULT FROM OPERATIONS	(25,967)	(27,444)
Finance income	2,894	1,371
Finance expense	(958)	(1,429)
Foreign currency exchange gain, net	2,294	4,618
Intercompany charging operating expenses	23,255	3,568
Sale of stake in associate	–	15,791
RESULT BEFORE INCOME TAXES	1,518	(3,525)
Income taxes	(225)	2,618
NET EARNINGS FROM HOLDING ACTIVITIES	1,293	(907)
Net earnings from subsidiaries	134,178	453,309
TOTAL NET EARNINGS	135,471	452,402

NOTES TO THE COMPANY FINANCIAL STATEMENTS

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

ASM International NV (ASMI or the Company) is a Dutch public liability company. Statutory seat: Versterkerstraat 8, 1322 AP Almere, the Netherlands.

The description of our activities and our structure, as included in the Notes to the Consolidated financial statements, also apply to the Company financial statements.

The accompanying Company financial statements are stated in thousands of euro unless otherwise indicated.

ACCOUNTING POLICIES APPLIED

The financial statements of the Company included in this section are prepared in accordance with Part 9 of Book 2 of the Dutch Civil Code. Section 362 (8), Book 2, Dutch Civil Code, allows companies that apply IFRS as endorsed by the European Union in their consolidated financial statements to use the same measurement principles in their Company financial statements. The Company has prepared these Company financial statements using this provision.

Participating interests in group companies

Investments in subsidiaries are stated at net asset value as we effectively exercise influence of significance over the operational and financial activities of these investments. For a list of all subsidiaries see Note 2 of the Consolidated financial statements.

NOTE 2. INVESTMENTS AND LOANS DUE FROM SUBSIDIARIES

	INVESTMENTS IN SUBSIDIARIES	LOANS DUE FROM SUBSIDIARIES	TOTAL
BALANCE JANUARY 1, 2016	1,669,910	53,270	1,723,180
Net result of subsidiaries	134,178	–	134,178
Other comprehensive income investments	(1,344)	–	(1,344)
Dividend received	(45,982)	–	(45,982)
Capitalizations	3,400	–	3,400
Dilution	2,814	–	2,814
Foreign currency translation effect	38,524	1,607	40,131
BALANCE DECEMBER 31, 2016	1,801,500	54,877	1,856,377
Net result of subsidiaries	453,309	–	453,309
Other comprehensive income investments	(2,844)	–	(2,844)
Dividend received	(728,997)	–	(728,997)
Capitalizations	422	–	422
Disposal of investments	(80)	–	(80)
Reclassification to current assets	–	(1,892)	(1,892)
Dilution	606	–	606
Foreign currency translation effect	(150,846)	(6,122)	(156,968)
BALANCE DECEMBER 31, 2017	1,373,070	46,863	1,419,933

Interest relates mainly to a subsidiary and is based on the Bank of America's prime rate with a rise of two percent points. The repayment schedule of the loan is as follows: 24 annual installments of US\$2 million, starting December 31, 2018, followed by a final installment of US\$5.3 million on December 31, 2043.

NOTE 3. OTHER INTANGIBLE ASSETS

The changes in the carrying amount of other intangible assets are as follows:

	SOFTWARE	PURCHASED TECHNOLOGY AND OTHER INTANGIBLE ASSETS	TOTAL
At cost:			
BALANCE JANUARY 1, 2016	17,958	6,397	24,355
Additions	6,603	–	6,603
BALANCE DECEMBER 31, 2016	24,561	6,397	30,958
Additions	2,187	–	2,187
BALANCE DECEMBER 31, 2017	26,748	6,397	33,145
Accumulated amortization:			
BALANCE JANUARY 1, 2016	12,798	2,929	15,727
Amortization for the year	443	1,204	1,647
BALANCE DECEMBER 31, 2016	13,241	4,133	17,374
Amortization for the year	1,261	669	1,930
BALANCE DECEMBER 31, 2017	14,502	4,802	19,304
Other intangible assets net:			
DECEMBER 31, 2016	11,320	2,264	13,584
DECEMBER 31, 2017	12,246	1,595	13,841

Other intangible assets are amortized over their useful lives of three to seven years. Estimated amortization expenses relating to other intangible assets are as follows:

	SOFTWARE	PURCHASED TECHNOLOGY AND OTHER INTANGIBLE ASSETS	TOTAL
2018	2,932	660	3,592
2019	4,325	660	4,985
2020	3,401	275	3,676
2021	1,588	–	1,588
Years thereafter	–	–	–
TOTAL	12,246	1,595	13,841

NOTE 4. GOODWILL

The carrying amount of the goodwill is related to the acquisitions operations in the following business units:

	DECEMBER 31,	2016	2017
Thermal products business unit		2,611	2,611
Plasma products business unit		8,659	8,659
TOTAL		11,270	11,270

NOTE 5. PROPERTY, PLANT AND EQUIPMENT

The changes in the amount of property, plant and equipment are as follows:

	LAND, BUILDINGS AND LEASEHOLD IMPROVEMENTS	FURNITURE AND FIXTURES	TOTAL
At cost:			
BALANCE JANUARY 1, 2016	47	276	323
Additions	–	176	176
BALANCE DECEMBER 31, 2016	47	452	499
Additions	–	177	177
BALANCE DECEMBER 31, 2017	47	629	676
Accumulated depreciation:			
BALANCE JANUARY 1, 2016	47	235	282
Depreciation for the year	–	26	26
BALANCE DECEMBER 31, 2016	47	261	308
Depreciation for the year	–	29	29
BALANCE DECEMBER 31, 2017	47	290	337
Property, plant and equipment, net:			
DECEMBER 31, 2016	–	191	191
DECEMBER 31, 2017	–	339	339

USEFUL LIVES IN YEARS:

Land, buildings and leasehold improvements	0-25
Furniture and fixtures	2-10

NOTE 6. DEFERRED TAX ASSETS

Based on tax filings, ASMI has net operating losses available at December 31, 2017 of €110,094 to reduce future income taxes. The Company believes that realization of its net deferred tax assets is dependent on the ability of the Company to generate taxable income in the future. Given the volatile nature of the semiconductor equipment industry and past experience, the Company believes that there is currently sufficient evidence to recognize a deferred tax asset in the amount of €7,812.

NOTE 7. EQUITY

The changes in equity are as follows:

(EUR thousand)	COMMON SHARES	CAPITAL IN EXCESS OF PAR VALUE	TREASURY SHARES	ACCUMULATED NET EARNINGS	NET EARNINGS CURRENT YEAR	LEGAL RESERVES		TOTAL EQUITY
						TRANSLATION RESERVE	OTHER LEGAL RESERVES	
BALANCE AS OF JANUARY 1, 2016	2,552	221,868	(84,000)	220,700	157,277	190,763	1,228,689	1,937,849
Appropriation of net earnings	—	—	—	157,277	(157,277)	—	—	—
Components of comprehensive income								
Net earnings	—	—	—	—	135,471	—	—	135,471
Other comprehensive income	—	—	—	—	—	38,725	—	38,725
TOTAL COMPREHENSIVE INCOME (LOSS)	—	—	—	—	135,471	38,725	—	174,196
Compensation expense share-based payments	—	8,387	—	—	—	—	—	8,387
Exercise stock options out of treasury shares	—	(2,591)	27,836	(10,536)	—	—	—	14,709
Vesting restricted shares out of treasury shares	—	(1,827)	1,827	—	—	—	—	—
Purchase of common shares	—	—	(97,140)	—	—	—	—	(97,140)
Dividend paid to common shareholders	—	—	—	(42,673)	—	—	—	(42,673)
Increased retained earnings subsidiaries	—	—	—	(51,323)	—	—	51,323	—
Fair value accounting investments	—	—	—	2,015	—	—	(2,015)	—
Capitalized development expenses subsidiaries	—	—	—	(13,448)	—	—	13,448	—
Other movements in investments in associates:								
Dilution	—	—	—	2,814	—	—	—	2,814
BALANCE AS OF DECEMBER 31, 2016	2,552	225,837	(151,477)	264,826	135,471	229,488	1,291,445	1,998,142
Appropriation of net earnings	—	—	—	135,471	(135,471)	—	—	—
Components of comprehensive income								
Net earnings	—	—	—	—	452,402	—	—	452,402
Other comprehensive income	—	—	—	—	—	(175,734)	—	(175,734)
TOTAL COMPREHENSIVE INCOME (LOSS)	—	—	—	—	452,402	(175,734)	—	276,668
Compensation expense share-based payments	—	7,801	—	—	—	—	—	7,801
Exercise stock options out of treasury shares	—	(10,612)	23,904	—	—	—	—	13,292
Vesting restricted shares out of treasury shares	—	(4,501)	4,501	—	—	—	—	—
Purchase of common shares	—	—	(243,527)	—	—	—	—	(243,527)
Cancellation of common shares out of treasury shares	(60)	—	61,945	(61,885)	—	—	—	—
Dividend paid to common shareholders	—	—	—	(41,470)	—	—	—	(41,470)
Increased retained earnings subsidiaries	—	—	—	121,741	—	—	(121,741)	—
Fair value accounting investments	—	—	—	404,092	—	—	(404,092)	—
Capitalized development expenses subsidiaries	—	—	—	(12,996)	—	—	12,996	—
Other movements in investments in associates:								
Dilution	—	—	—	606	—	—	—	606
BALANCE AS OF DECEMBER 31, 2017	2,492	218,525	(304,654)	810,385	452,402	53,754	778,608	2,011,512

COMMON SHARES, PREFERRED AND FINANCING

PREFERRED SHARES

The authorized capital of the Company amounts to 110,000,000 common shares of €0.04 par value, 118,000 preferred shares of €40 par value and 8,000 financing preferred shares of €40 par value.

During the Annual General Meeting of Shareholders of May 22, 2017, the Board got approval to cancel 1.5 million treasury shares. This became effective as per August 1, 2017.

As at December 31, 2017, 62,297,394 ordinary shares with a nominal value of €0.04 each were issued and fully paid up, of which 6,157,241 ordinary shares are held by us in treasury. All shares have one vote per €0.04 par value. Treasury shares held by the Company cannot be voted on.

As at December 31, 2017 no preferred shares are issued.

TREASURY SHARES

With respect to treasury shares, reference is made to Note 11 to the Consolidated financial statements.

OTHER LEGAL RESERVES

Legal reserves include reserves regarding participating interests, capitalized development expenses and the cumulative foreign currency translation effect on translation of foreign operations, and is included in the accumulated other comprehensive income (loss).

The legal reserve for participating interests regarding retained earnings, which amounts to €679,686 (2016: €1,205,519), pertains to participating interests that are accounted for according to the equity accounting method. The reserve represents the difference between the participating interest' retained profit and direct changes in equity, as determined on the basis of the Company's accounting policies, and the share thereof that the Company may distribute. As to the latter share, this takes into account any profits that may not be distributable by participating interests that are Dutch limited companies based on the distribution tests to be performed by the management of those companies. The legal reserve is determined on an individual basis.

In accordance with applicable legal provisions, a legal reserve for the carrying amount of €98,922 (2016: €85,926) has been recognized for capitalized development and start-up costs.

Changes in legal reserves in 2016 and 2017 were as follows:

	RESERVE FOR PARTICIPATING INTERESTS, REGARDING RETAINED EARNINGS	RESERVE FOR PARTICIPATING INTERESTS, REGARDING CAPITALIZED DEVELOPMENT EXPENSES	OTHER LEGAL RESERVES
BALANCE AS OF JANUARY 1, 2016	1,156,211	72,478	1,228,689
Retained earnings subsidiaries and investments	51,323	–	51,323
Fair value accounting investments	(2,015)	–	(2,015)
Development expenditures	–	13,448	13,448
BALANCE AS OF DECEMBER 31, 2016	1,205,519	85,926	1,291,445
Retained earnings subsidiaries and investments	(121,741)	–	(121,741)
Fair value accounting investments	(404,092)	–	(404,092)
Development expenditures	–	12,996	12,996
BALANCE AS OF DECEMBER 31, 2017	679,686	98,922	778,608

For more detailed information, reference is made to Note 11 to the Consolidated financial statements.

EMPLOYEE STOCK PLAN, OPTION PLAN AND EMPLOYEE RESTRICTED SHARES PLAN

The Company has adopted various stock option plans and restricted share plans and has entered into related agreements with various employees. For detailed information, reference is made to Note 12 to the Consolidated financial statements.

NOTE 8. ACCRUED EXPENSES AND OTHER PAYABLES

Accrued expenses and other payables consist of personnel related items €4,425 (2016: €2,039), financing related items €4,920 (2016: €949) and other €2,504 (2016: €633).

NOTE 9. SHARE OWNERSHIP OF THE MANAGEMENT BOARD AND SUPERVISORY BOARD

With respect to share ownership of the Management Board and Supervisory Board, reference is made to Note 24 and 25 to the Consolidated financial statements.

NOTE 10. PERSONNEL

The average number of employees of ASMI in full-time equivalents during 2017 was 19.8 (2016: 21.2). Salaries, social security charges and pension expenses amounted to €6,068, €232 and €534, respectively, for 2017 (2016: expenses of €5,370, €134 and €532, respectively). Further information concerning the number of employees can be found in Note 21 to the Consolidated financial statements.

For information on the parent company's defined benefit pension plan, the remuneration of the Management Board and the Supervisory Board and the parent company's share-based compensation plans, see Notes 12 and 24 to the Consolidated financial statements.

NOTE 11. COMMITMENTS AND CONTINGENCIES

At December 31, 2017, operating leases having initial or remaining non-cancelable terms in excess of one year are as follows:

	2016	2017
Not later than 1 year	170	162
Between 1 and 5 years	305	173
Later than 5 years	–	–
TOTAL	475	335

Lease payments recognized in the expenses were €195 for the year ended December 31, 2017 (2016: € 200).

With respect to certain Dutch subsidiaries, ASMI has assumed joint and several liability in accordance with Article 403, Part 9 of Book 2 of the Dutch Civil Code.

ASMI forms a fiscal unity (tax group for corporate income tax purposes) together with its Dutch subsidiaries for purposes of Dutch tax laws and is as such jointly and severally liable for the tax debts of the unity. The tax unity consists of ASM International NV and the following subsidiaries:

- › ASM Europe BV (operational company)
- › ASM IP Holding BV (operational company)
- › ASM United Kingdom Sales BV (operational company)
- › ASM Germany Sales BV (operational company)
- › ASM Pacific Holding BV (holding company)
- › ASM Netherlands Holding BV (holding company)

NOTE 12. AUDITOR'S FEES AND SERVICES

For information regarding auditor's fees and services we refer to Note 26 to the Consolidated financial statements.

NOTE 13. CORRECTION OF ERRORS

CORRECTION OF ERRORS

During 2017, the Company discovered that the dilution effect was erroneously not included for the goodwill and other intangible assets of the associate ASMPT. As a consequence, the value of the investment in associate was overstated. The Company also reclassified a long-term loan. The errors have been corrected by restating each of the affected financial statement line items for prior periods.

The following table summarizes the impact.

Company Balance Sheet

	JANUARY 1, 2016		
	AS PREVIOUSLY REPORTED	ADJUSTMENTS	AS RESTATED
INVESTMENTS IN SUBSIDIARIES	1,684,752	(14,842)	1,669,910
Loans to subsidiaries	48,958	4,312	53,270
Others	221,162	—	221,162
TOTAL ASSETS	1,954,872	(10,530)	1,944,342
EQUITY	1,948,379	(10,530)	1,937,849
Liabilities	6,493	—	6,493
TOTAL EQUITY & LIABILITIES	1,954,872	(10,530)	1,944,342

	DECEMBER 31, 2016		
	AS PREVIOUSLY REPORTED	ADJUSTMENTS	AS RESTATED
INVESTMENTS IN SUBSIDIARIES	1,823,526	(22,026)	1,801,500
Loans to subsidiaries	50,565	4,312	54,877
Others	149,789	—	149,789
TOTAL ASSETS	2,023,880	(17,714)	2,006,166
EQUITY	2,015,856	(17,714)	1,998,142
Liabilities	8,024	—	8,024
TOTAL EQUITY & LIABILITIES	2,023,880	(17,714)	2,006,166

SIGNING

Almere

March 16, 2018

SUPERVISORY BOARD

J.C. Lobbezoo

H.W. Kreutzer

M.C.J. van Pernis

U.H.R. Schumacher

S. Kahle-Galonske

MANAGEMENT BOARD

C.D. del Prado

P.A.M. van Bommel

INDEPENDENT AUDITOR'S REPORT

To: the General Meeting of Shareholders and the Supervisory Board of ASM International N.V.

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS 2017 INCLUDED IN THE ANNUAL REPORT

OUR OPINION

In our opinion:

- › the accompanying consolidated financial statements give a true and fair view of the financial position of ASM International N.V. as at December 31, 2017 and of its result and its cash flows for the year then ended, in accordance with International Financial Reporting Standards as adopted by the European Union (EU-IFRS) and with Part 9 of Book 2 of the Dutch Civil Code.
- › the accompanying company financial statements give a true and fair view of the financial position of ASM International N.V. as at December 31, 2017 and of its result for the year then ended in accordance with Part 9 of Book 2 of the Dutch Civil Code.

WHAT WE HAVE AUDITED

We have audited the financial statements 2017 of ASM International N.V. ("ASMI" or the "Company") based in Almere. The financial statements include the consolidated financial statements and the ASM International N.V. company financial statements.

The consolidated financial statements comprise:

- 1 the consolidated statement of financial position as at December 31, 2017;
- 2 the following consolidated statements for 2017: the statement of profit or loss, the statement of comprehensive income, the statement of changes in equity and the statement of cash flows; and
- 3 the notes comprising a summary of the significant accounting policies and other explanatory information.

The company financial statements comprise:

- 1 the company balance sheet as December 31, 2017;
- 2 the company statement of profit or loss for 2017; and
- 3 the notes comprising a summary of the accounting policies and other explanatory information.

BASIS FOR OUR OPINION

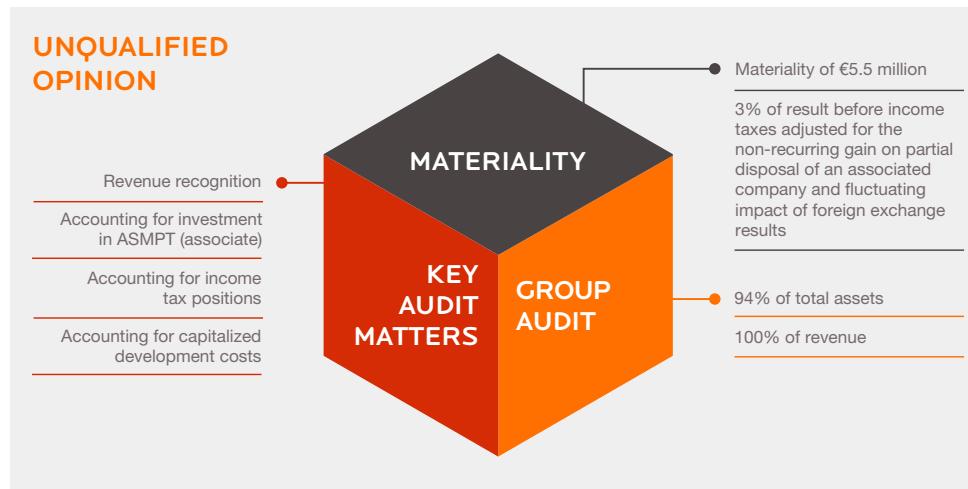
We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing. Our responsibilities under those standards are further described in the 'Our responsibilities for the audit of the financial statements' section of our report.

We are independent of ASM International N.V. in accordance with the EU Regulation on specific requirements regarding statutory audits of public-interest entities, the Wet toezicht accountantsorganisaties (Wta, Audit firms supervision act), the Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore, we have complied with the Verordening gedrags- en beroepsregels accountants (VGBA, Dutch Code of Ethics).

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

AUDIT APPROACH

SUMMARY



Materiality

Based on our professional judgement we determined the materiality for the financial statements as a whole at EUR 5.5 million (2016: EUR 5.0 million). The materiality is determined with reference to result before income taxes adjusted for non-recurring gain on partial disposal of an associate and fluctuating impact of foreign exchange results, of which it represents 3% (2016: 5%). We consider result before income taxes adjusted for non-recurring gain on partial disposal of an associate and fluctuating impact of foreign exchange results as the most appropriate benchmark because the Company is a profit oriented company and the key users of the financial statements are focused on profit. We have also taken into account misstatements and/or possible misstatements that in our opinion are material for the users of the financial statements for qualitative reasons.

We agreed with the Supervisory Board that misstatements in excess of EUR 250,000 which are identified during the audit, would be reported to them, as well as smaller misstatements that in our view must be reported on qualitative grounds.



Scope of the group audit

ASM International N.V. is at the head of a group of components. The financial information of this group is included in the consolidated financial statements of ASM International N.V.

Our group audit mainly focused on significant group entities where account balances are of significant size, have significant risks of material misstatement to the Group associated with them or are considered significant for other reasons.

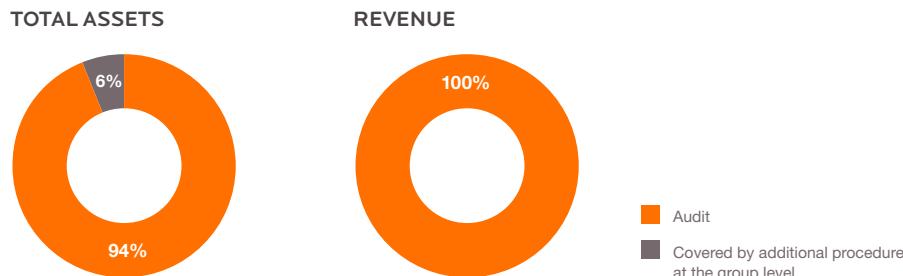
Considering our ultimate responsibility for the opinion, we are also responsible for directing, supervising and performing the group audit. In this context, we have determined the nature and extent of the audit procedures to be carried out by component auditors. Decisive factors were the significance and / or the risk profile of the group entities or operations (components). On this basis, we selected components for which an audit of account balance had to be performed. Furthermore, we have determined the nature and extent of the audit procedures that we perform at group level and at the Shared Services Center ("SSC").

Our procedures cover the significant operations in Japan, Korea, the Netherlands, Singapore and the United States of America, all mainly through our audit procedures at the SSC, supplemented with local audits of account balances. Furthermore, our procedures cover the (results from) investments in associates, including the work performed by the non-KPMG member firm auditors on ASM Pacific Technology Ltd ("ASMPT"). The remaining balances are covered by additional procedures at group level.

We have sent detailed instructions to all component auditors, covering the significant areas that should be covered (which included the relevant risks of material misstatement detailed below) and set out the information required to be reported to the group auditor. We visited America, Singapore and ASMPT in Hong Kong for site visits and file reviews and held various telephone calls with the auditors of the components, to discuss the group audit, significant risks, audit approach and instructions, as well as the audit findings and observations reported to the group auditor.

By performing the procedures mentioned above at group components, together with additional procedures at group level, we have been able to obtain sufficient and appropriate audit evidence about the group's financial information to provide an opinion about the consolidated financial statements.

Our procedures as described above can be summarized as follows:



Our key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements. We have communicated the key audit matters to the Supervisory Board. The key audit matters are not a comprehensive reflection of all matters discussed.

These matters were addressed in the context of our audit of the financial statements as a whole and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

REVENUE RECOGNITION

Description

Net sales is measured taking into account multiple element arrangements, for example a single sales transaction that combines the delivery of goods and rendering of (installation) services, as contracts with customers typically include separately identifiable components that are recognized based on the relative selling price. Furthermore, net sales is recognized when the risk and rewards of products and services have been transferred to the customer. Due to the multitude and variety of contractual terms, the different pricing elements and the risk of management override of controls, revenue recognition is considered to be complex and involves management judgement as it relates to the allocation of revenue to the various elements in sales contracts.

Our response

Our audit procedures included, among other things, assessing the appropriateness of the Company's revenue recognition accounting policies relating to revenue recognition. We tested the effectiveness of the Company's review controls in the sales process that would identify a misstatement as a result of revenue recognition in the incorrect period. We also assessed the existence and accuracy of the sales recorded by performing three-way match of sales using data analytics tools and completeness of sales by performing procedures in the cut-off period. We further assessed the adequacy of the net sales disclosures contained in the consolidated Company's financial statements.

Our observation

The results of our procedures related to the accounting for revenue recognition are satisfactory.

ACCOUNTING FOR INVESTMENT IN ASMPT (ASSOCIATE)

Description

ASM International N.V. holds 25% of the shares in ASM Pacific Technology Ltd ("ASMPT"), an entity listed on the Hong Kong Stock Exchange. The investment in ASMPT is accounted for under the equity method. The accounting for the results of and investment in ASMPT is significant to our audit due to the book value of the investment.

As at December 31, 2017, the Investments and associated companies amounted to EUR 731 million whilst the share in income from investments and associates amounted to EUR 90 million.

Our response

Our audit procedures included instructing the statutory auditor of ASMPT to perform an audit on the relevant financial information of ASMPT for the purpose of the consolidated financial statements of ASMI. During the year, we discussed the risk assessment and audit strategy of the statutory auditor, as well as any significant developments. Subsequently we performed a file review at the statutory auditor's office. We evaluated management considerations on the impairment indicators of the investment in ASMPT. We also assessed reasonableness of the accounting for the partial disposal of ASMPT. We further assessed the adequacy of the Company's disclosure in Note 6, Investments in associates.

Our observation

We found that accounting for investments in associated companies is acceptable. We noted that the dilution effect was erroneously not included for the goodwill and other intangible assets of ASMPT. As a consequence, the value of the investment in associate and retained earnings as at December 31, 2016 were overstated by EUR 18 million. The errors have been corrected by restating each of the affected financial statement line items for the prior period. Refer to Note 6, Investments in associates and Note 29, Correction of errors.

ACCOUNTING FOR INCOME TAX POSITIONS

Description

Income tax positions are significant to our audit because the assessment process is complex, includes a certain level of estimation uncertainty and the amounts involved are material to the financial statements as a whole. ASMI's operations are subject to income taxes in various jurisdictions which results in complexities of transfer pricing and the applicability of various tax legislations. Furthermore, the Company has significant unrecognized net operating losses.

As at December 31, 2017, the deferred tax assets amounted to EUR 18 million and the unrecognized net operating losses amounted to EUR 114 million.

Our response

We performed audit procedures on the completeness, existence and accuracy of the amounts recognized as current and deferred tax, including the assessment of correspondence with tax authorities and the evaluation of tax exposures. In addition, in respect of deferred tax assets, we assessed and tested management's assumptions that substantiate the probability that deferred tax assets recognized in the balance sheet will be recovered through taxable income in future years and available tax planning strategies. During our procedures, we challenged, among other things, budgets, forecasts and application of tax laws. In addition, we performed a retrospective review on prior year management assumptions. In those components determined to be part of jurisdictions with a significant tax risk, we involved tax specialists to analyze the tax positions and to challenge the assumptions used to determine the tax positions. We also assessed the adequacy of the Company's disclosure in Note 20, Income taxes.

Our observation

The results of our procedures related to the accounting for income tax positions are satisfactory.

ACCOUNTING FOR CAPITALIZED DEVELOPMENT COSTS

Description

Capitalized development costs of EUR 99 million are deemed significant to our audit, given the significance of the position per December 31, 2017, the rapid technological change in the industry, as well as the specific IFRS criteria that have to be met for capitalization. This involves management judgment, such as assessment of technical feasibility, intention and ability to complete the intangible asset, ability to use or sell the asset, generation of future economic benefits and the ability to measure the costs reliably. In addition, determining whether there is any indication of impairment of the carrying value of the intangible assets, requires management judgment and assumptions which are affected by future market or economic developments.

Our response

We have performed audit procedures over the accuracy and valuation of amounts recognized. Our audit procedures included assessing the appropriateness of the Company's accounting policies relating to internal and external cost capitalization. We challenged the key assumptions used or judgements made in capitalizing development costs, the accuracy of costs included and the useful economic life attributed to the asset. In addition, we considered whether any indicators of impairment were present by understanding the business rationale and by challenging management judgments and assumptions on future market or economic developments. We also assessed the adequacy of the Company's disclosure in Note 5, Other intangible assets.

Our observation

The results of our procedures related to the accounting for capitalized development costs are satisfactory.

REPORT ON THE OTHER INFORMATION INCLUDED IN THE ANNUAL REPORT

In addition to the financial statements and our auditor's report thereon, the annual report contains other information that consists of:

- › Strategy and Business;
- › Performance review;
- › Governance;
- › Other information pursuant to Part 9 of Book 2 of the Dutch Civil Code.

Based on the following procedures performed, we conclude that the other information:

- › is consistent with the financial statements and does not contain material misstatements;
- › contains the information as required by Part 9 of Book 2 of the Dutch Civil Code.

We have read the other information. Based on our knowledge and understanding obtained through our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements.

By performing these procedures, we comply with the requirements of Part 9 of Book 2 of the Dutch Civil Code and the Dutch Standard 720. The scope of the procedures performed is substantially less than the scope of those performed in our audit of the financial statements.

Management Board of ASM International N.V. is responsible for the preparation of the other information, including the information as required by Part 9 of Book 2 of the Dutch Civil Code.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS ENGAGEMENT

We were engaged by the Annual General Meeting of Shareholders as auditor of ASM International N.V. on May 21, 2014, as of the audit for the year 2015 and have operated as statutory auditor ever since that financial year.

NO PROHIBITED NON-AUDIT SERVICES

We have not provided prohibited non-audit services as referred to in Article 5(1) of the EU Regulation on specific requirements regarding statutory audits of public-interest entities.

DESCRIPTION OF RESPONSIBILITIES REGARDING THE FINANCIAL STATEMENTS

RESPONSIBILITIES OF MANAGEMENT BOARD OF ASM INTERNATIONAL N.V. AND THE SUPERVISORY BOARD FOR THE FINANCIAL STATEMENTS

Management Board of ASM International N.V. is responsible for the preparation and fair presentation of the financial statements in accordance with EU-IFRS and Part 9 of Book 2 of the Dutch Civil Code. Furthermore, Management Board of ASM International N.V. is responsible for such internal control as management determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

As part of the preparation of the financial statements, Management Board of ASM International N.V. is responsible for assessing ASM International N.V.'s ability to continue as a going concern. Based on the financial reporting frameworks mentioned, Management Board of ASM International N.V. should prepare the financial statements using the going concern basis of accounting unless Management Board of ASM International N.V. either intends to liquidate the ASM International N.V. or to cease operations, or has no realistic alternative but to do so. Management Board of ASM International N.V. should disclose events and circumstances that may cast significant doubt on the company's ability to continue as a going concern in the financial statements.

The Supervisory Board is responsible for overseeing the ASM International N.V.'s financial reporting process.

OUR RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

Our objective is to plan and perform the audit engagement in a manner that allows us to obtain sufficient and appropriate audit evidence for our opinion.

Our audit has been performed with a high, but not absolute, level of assurance, which means we may not detect all material errors and fraud during our audit.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements. The materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

A further description of our responsibilities for the audit of the financial statements is included in appendix 1 of this auditor's report. This description forms part of our auditor's report.

Amstelveen, March 16, 2018

KPMG Accountants N.V.
R.P. Kreukniet RA

APPENDIX 1

We have exercised professional judgement and have maintained professional scepticism throughout the audit, in accordance with Dutch Standards on Auditing, ethical requirements and independence requirements. Our audit included among others:

- › identifying and assessing the risks of material misstatement of the financial statements, whether due to fraud or error, designing and performing audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than the risk resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- › obtaining an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the ASM International N.V.'s internal control;
- › evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management Board of ASM International N.V.;
- › concluding on the appropriateness of Management Board of ASM International N.V.'s use of the going concern basis of accounting, and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on ASM International N.V.'s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause a company to cease to continue as a going concern;
- › evaluating the overall presentation, structure and content of the financial statements, including the disclosures; and
- › evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Because we are ultimately responsible for the opinion, we are also responsible for directing, supervising and performing the group audit. In this respect we have determined the nature and extent of the audit procedures to be carried out for group components. Decisive were the size and/or the risk profile of the group components or operations. On this basis, we selected group components for which an audit or review had to be carried out on the complete set of financial information or specific items.

We communicate with the Supervisory Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant findings in internal control that we identify during our audit. In this respect we also submit an additional report to the audit committee in accordance with Article 11 of the EU Regulation on specific requirements regarding statutory audits of public-interest entities. The information included in this additional report is consistent with our audit opinion in this auditor's report.

We provide the Supervisory Board with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Supervisory Board, we determine the key audit matters: those matters that were of most significance in the audit of the financial statements. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, not communicating the matter is in the public interest.

SHAREHOLDERS & GENERAL INFORMATION

CHAPTER PREVIEW

SHAREHOLDERS INFORMATION

- › Interview with the CFO
- › Share listing
- › Shareholder returns
- › Shares and shareholders' rights
- › Key dates
- › Key figures
- › Contact information

GENERAL INFORMATION

- › Product description
- › Declarations
- › Other information
- › Non-financial data glossary
- › Definitions and abbreviations
- › Locations worldwide
- › Safe harbor statement
- › Privacy statement



SHAREHOLDERS INFORMATION

CHAPTER PREVIEW

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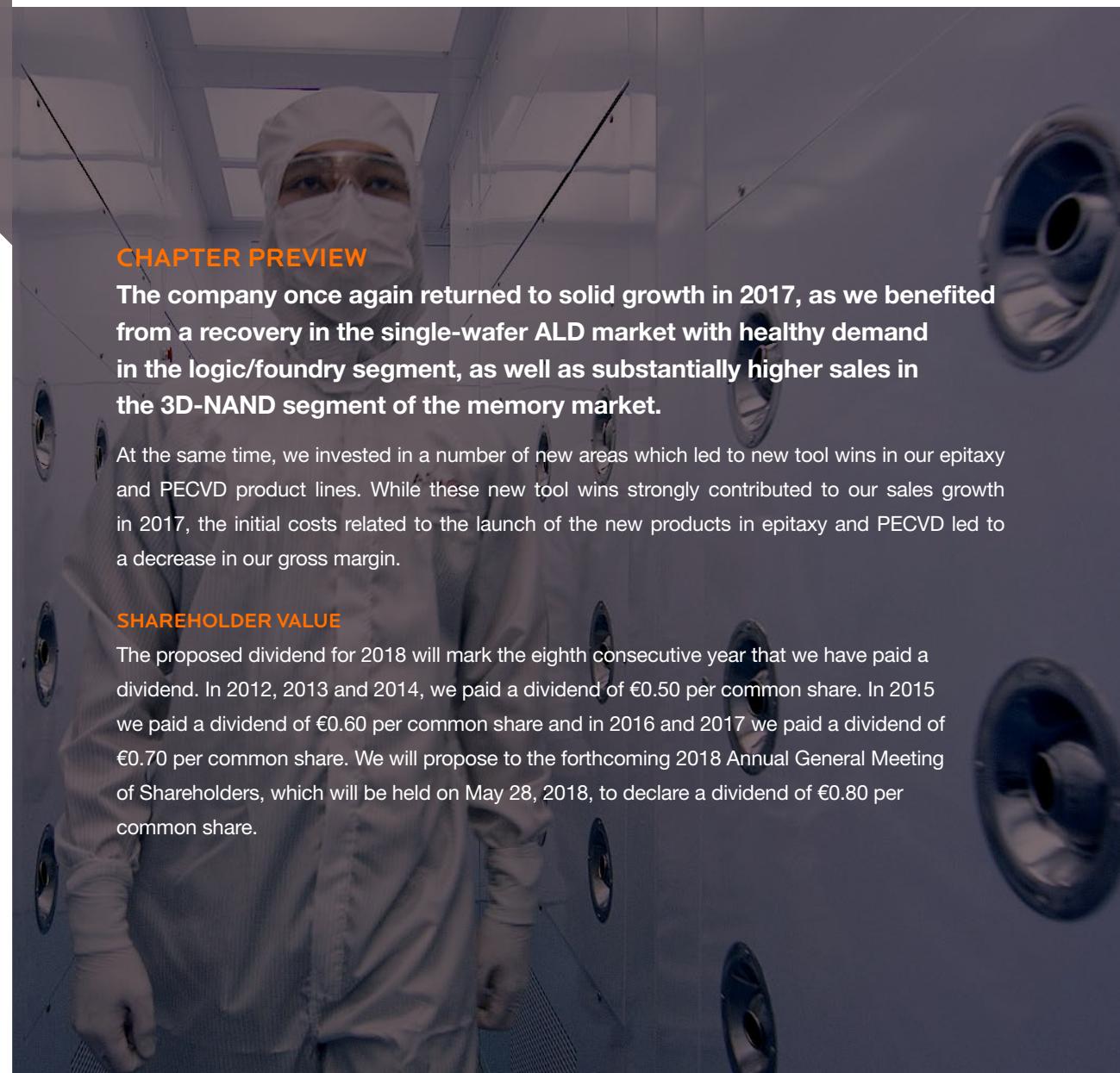
CHAPTER PREVIEW

The company once again returned to solid growth in 2017, as we benefited from a recovery in the single-wafer ALD market with healthy demand in the logic/foundry segment, as well as substantially higher sales in the 3D-NAND segment of the memory market.

At the same time, we invested in a number of new areas which led to new tool wins in our epitaxy and PECVD product lines. While these new tool wins strongly contributed to our sales growth in 2017, the initial costs related to the launch of the new products in epitaxy and PECVD led to a decrease in our gross margin.

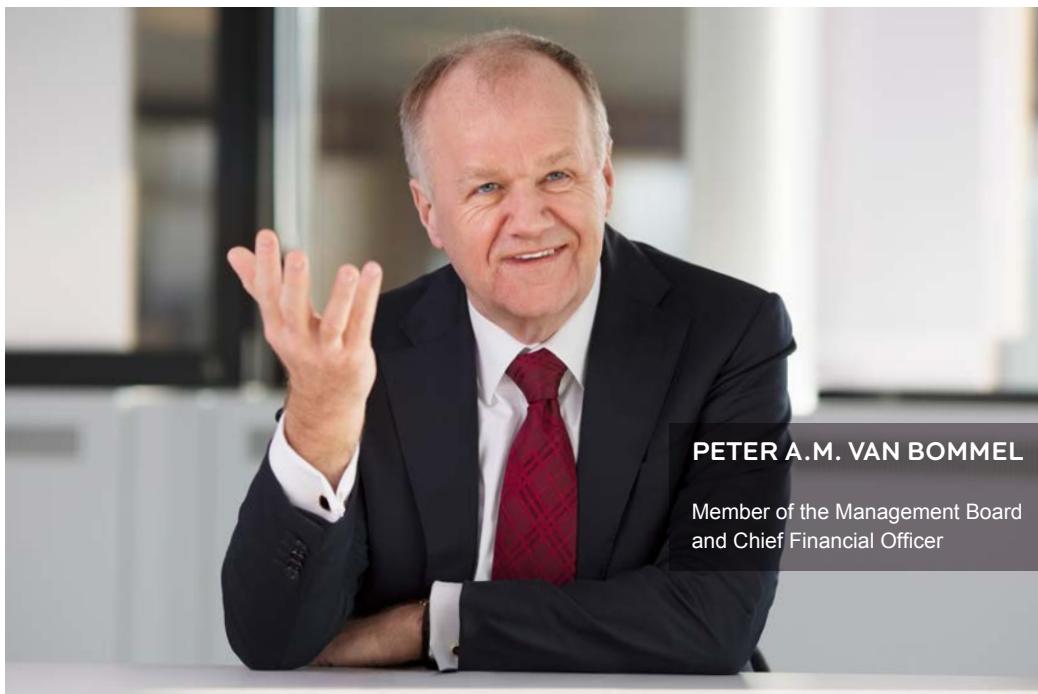
SHAREHOLDER VALUE

The proposed dividend for 2018 will mark the eighth consecutive year that we have paid a dividend. In 2012, 2013 and 2014, we paid a dividend of €0.50 per common share. In 2015 we paid a dividend of €0.60 per common share and in 2016 and 2017 we paid a dividend of €0.70 per common share. We will propose to the forthcoming 2018 Annual General Meeting of Shareholders, which will be held on May 28, 2018, to declare a dividend of €0.80 per common share.



INTERVIEW WITH THE CFO

As revenue returned to solid growth again in 2017, Chief Financial Officer Peter A.M. van Bommel explains the importance of continued investments to position the company for long term growth. In the following interview he discusses some of the key financial topics that impacted the company in 2017 and comments on the reduction of the stake in ASML that was executed during the year.



PETER A.M. VAN BOMMEL

Member of the Management Board
and Chief Financial Officer

HOW WOULD YOU DESCRIBE ASMI'S FINANCIAL PERFORMANCE IN 2017?

We returned to growth again in 2017 with 23% higher sales of €737 million, which is a new record high. We benefited from a recovery in the single-wafer ALD market with healthy demand in the logic/foundry segment and substantially higher sales in the 3D-NAND segment of the memory market. We also made investments in new areas resulting in new tool wins in our epitaxy and PECVD product lines. While these new tool wins strongly contributed to our sales growth in 2017, the initial costs related to the launch of the new products in epitaxy and PECVD led to a decrease in our gross margin.

Operating expenses remained under control and decreased as a percentage of revenue from 30% to 26%. Operating profit increased 38% with the operating margin improving to 15.3% (2016: 13.8%).

"WE ARE STEPPING UP INVESTMENTS TO PREPARE OUR COMPANY FOR THE NEXT STAGE OF GROWTH."

Results from investments excluding amortization of intangible assets – reflecting our share of ASML's net profits – showed a strong increase of 66% to €112 million. This is the balance of, on the one hand, a 89% increase in ASML's net profits on a 100% basis and, on the other hand, a reduction of our stake in ASML during the year from approximately 39% to approximately 25%.

In total, our normalized net profits increased by 17% to €190 million. This increase was impacted by a negative currency translation effect of €31 million included in our financing costs. As we hold a substantial part of cash balances in US dollars and other foreign currencies, the appreciation of the euro during 2017 led to this negative translation effect. In 2016, financing costs still included a translation gain of €13 million. Apart from translation effects, the impact from exchange rate fluctuations on our relative profitability is limited, as the currency exposure of our sales largely matches that of our cost base.

WHAT EXPLAINS THE DECREASE IN GROSS MARGINS IN 2017?

Our gross margin dropped from 44.2% to 41.5% in 2017. This is fully explained by the initial costs of the newly introduced products in our epitaxy and PECVD activities. Excluding this impact, our gross margin would have been relatively stable in 2017. The gross margin was still steady at almost 44% in the first half but decreased, as we had announced with our second quarter results publication, to approximately 40% in the second half. Following the tool wins that we announced earlier in 2017 our sales in the third and fourth quarter included multiple units of the new epitaxy and PECVD

systems. As these launches represent completely new products and applications, the first tools still carry a lower gross margin, which is not unusual for new product penetrations in the market. This is only a temporary effect. Margins on the new products are on track to improve and as a result we expect the gross margin for the total company to normalize again in the course of the year.

On a structural basis our gross margin is healthy. Over time, we implemented several programs that have improved the flexibility and efficiency of our manufacturing and supply chain operations. With an ongoing strong cost focus throughout our organization, we expect to maintain gross margins within a percentage range of low-to-mid 40s, barring a downturn in the semiconductor equipment market. On a quarterly basis, gross margins will continue to be impacted by factors such as revenue mix and utilization.

HOW HAS THE FREE CASH FLOW DEVELOPED IN 2017?

Over the last several years, we have consistently generated a positive free cash flow. For the full year 2017 free cash flow amounted to €32 million, approximately stable compared to 2016. The development in free cash flow was held back by a rise in working capital and an increase in capex. The rise in working capital is explained by higher accounts receivables due to the back-half weighted character of sales in the fourth quarter of 2017, which was even more pronounced than in 2016. In addition, inventories increased during 2017 and reflected our higher activity level including the new products in epitaxy and PECVD. The underlying quality of working capital remained healthy. Capital expenditure increased from €27 million to €44 million, largely related to the increase in our R&D activities. We are stepping up investments to prepare our company for the next stage of growth. In the last several years we could largely accommodate the increased demand within our existing facilities. To grow to structurally higher levels we plan to increase investments in the forthcoming periods. ALD continues to be an attractive growth market and in epitaxy and PECVD we now also have good opportunities for further expansion. Investments include the construction of a new facility and cleanroom in Korea and the construction of a new manufacturing facility in Singapore. After a first impact in 2017 these investments will lead to a higher level of capital expenditure in 2018-2019.

ASMI REDUCED ITS STAKE IN ASMPT IN 2017. WHAT WAS THE FINANCIAL IMPACT?

During the year we reduced our stake in ASMPT in two steps from approximately 39% to approximately 25%. In April 2017 we sold a 4.9% stake in a partial secondary share placement for proceeds of approximately €245 million. We used the proceeds for a new share €250 million buyback program that we started in September last year. Last November, we sold another 9.1% stake in ASMPT that generated proceeds of approximately €445 million. We intend to use approximately €220 million of these proceeds for a capital return of €4 per common share. This capital return will

be effected to be free of dividend withholding tax and will be proposed to the AGM 2018. Moreover, we plan to use €250 million for a new share buyback program. Our reported net earnings in 2017 included a total result of €285 million related to the stake sales in ASMPT.

CAN YOU COMMENT ON THE STRONG CASH POSITION OF THE COMPANY?

The cash position of €836 million at the end of 2017 includes a large part of the cash proceeds of the ASMPT stake sales that we have committed to return to our shareholders. Our overall financial position continues to be healthy and enables us to continue investing in the growth of our business, which remains our key priority. Over the past few years our cash position has remained above our minimum target level of around €300 million. In line with our commitment to use excess cash for the benefit of our shareholders, we completed during 2017 our third consecutive €100 million share buyback program. We also started a new €250 million program that was 60% complete by the end of 2017 and 97% complete on March 9, 2018. During 2017 we returned approximately €285 million in total to shareholders in the form of dividends and share buybacks. This was up from €140 million in 2016 and €116 million in 2015.

Looking at 2018, next to the tax-efficient capital return and the announced new €250 million share buyback program, we will propose a dividend of €0.80 per share to the forthcoming AGM, which is an increase of 14% compared to last year. We will also propose the cancellation of 6 million shares. This will reduce the number of issued shares by almost 10%.

THIS YEAR ASMI DECIDED NOT TO PUBLISH A SEPARATE CORPORATE RESPONSIBILITY REPORT. CAN YOU EXPLAIN WHY?

During the last three years we published separate Corporate Responsibility reports as we wanted to highlight the progress we had made in strengthening corporate responsibility within our company. Over the last several years, we stepped up our efforts to reduce our environmental footprint, further strengthen our safety culture and strongly improve our Transparency Benchmark Evaluation score, just to mention a few examples. This year we decided to combine the Corporate Responsibility report and the Annual Report. While we recognize that a lot of work still needs to be done, we believe it is an important first step towards integrated reporting. In this way, we aim to increase the relevance and quality of our reporting for all our stakeholders and to further strengthen corporate responsibility in all aspects of our activities.

SHARE LISTING

Our strategy aims to create sustainable value for all our stakeholders. As part of this strategy, we are committed to creating long-term shareholder value. This chapter provides information that is particularly relevant for shareholders and investors, including information related to the share listing and share price performance, dividends and share buybacks.

On December 31, 2017, the total number of issued common shares of ASMI amounted to 62,297,394 compared to 63,797,394 at year-end 2016. The decrease was the result of the cancellation of 1,500,000 treasury shares that was approved by the Annual Meeting of Shareholders (AGM) on May 22, 2017, and became effective on August 1, 2017.

On December 31, 2017, we had 56,140,153 outstanding common shares excluding 6,157,241 treasury shares. This compared to 59,815,843 outstanding common shares and 3,981,551 treasury shares at year-end 2016. Besides the cancellation of 1.5 million treasury shares in August 2017 the change in the number of treasury shares in 2017 was the result of approximately 4.4 million repurchased shares and approximately 745,000 treasury shares that were used as part of share based payments.

2017

As per January 1:

Issued shares	63,797,394
Treasury shares	3,981,551
Outstanding shares	59,815,843

Changes during the year:

Cancellation of treasury shares	1,500,000
Share buybacks	4,420,946
Treasury shares used for share based performance programs	745,256

As per December 31:

Issued shares	62,297,394
Treasury shares	6,157,241
Outstanding shares	56,140,153

On December 31, 2017, 55,783,384 of the outstanding common share were registered with our transfer agent in the Netherlands, ABN AMRO Bank NV; and 356,769 were registered with our transfer agent in the United States, Citibank, NA, New York.

MARKET CAPITALIZATION

The market capitalization of ASMI at year-end 2017 was €3,165 million, based on the closing share price of €56.37 at Euronext Amsterdam on December 29, 2017 and 56.1 million total outstanding shares per year-end. The market capitalization at year-end 2016 was €2,551 million.

SHARE PERFORMANCE

On December 29, 2017, the closing price of ASMI's shares on Euronext Amsterdam was €56.37. The highest closing price during the year was €62.27, on November 21, 2017, and the lowest was €42.07, on January 5, 2017. The average daily trading volume of ASMI shares on Euronext Amsterdam in 2017 was 251,997. This compares to an average daily volume of 197,807 in 2016.

The graph below shows the performance of ASMI's shares on Euronext. The total share return in this graph is the performance of the share including dividends paid and capital returned over the period.

SHARE PRICE PERFORMANCE AND TOTAL SHARE RETURN %



Following the voluntary delisting from Nasdaq in August 2015, our NY Registry Shares have been eligible for trading on the over-the-counter (OTC) market in the United States under the symbol ASMIY. Information on the trading and share price of our shares on the OTC Market in the United States can be found on www.otcmarkets.com.

SHAREHOLDER RETURNS

We are committed to paying a sustainable dividend. Additionally, in recent years we have returned excess cash to the financial markets in the form of share buyback programs and an extraordinary return of capital.

DIVIDENDS

ASMI aims to pay a sustainable annual dividend. Annually, the Supervisory Board, upon proposal of the Management Board, will assess the amount of dividend that will be proposed to the Annual General Meeting of Shareholders (AGM). The decision that a dividend be proposed to the AGM will be subject to the availability of distributable profits as well as retained earnings and may be affected by our potential future funding requirements. Accordingly, dividend payments may fluctuate and could decline or be omitted in any year.

The proposed dividend for 2018 will mark the eighth consecutive year that we have paid a dividend. In 2012, 2013 and 2014, we paid a dividend of €0.50 per common share. In 2015 we paid a dividend of €0.60 per common share and in 2016 and 2017 we paid a dividend of €0.70 per common share.

ASMI will propose to the forthcoming 2018 AGM, which will be held on May 28, 2018, to declare a dividend of €0.80 per common share.

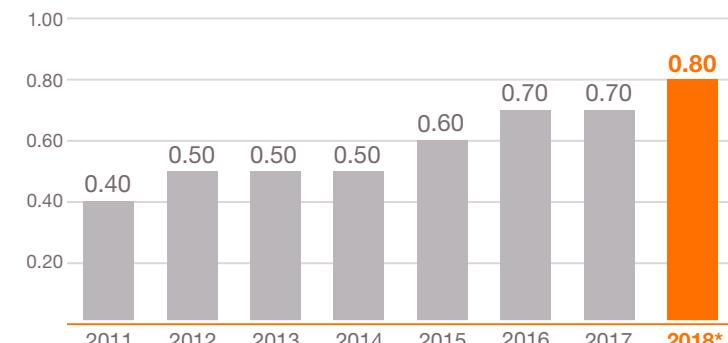
DIVIDEND TIMETABLE

Ex-dividend date shares Euronext and OTC US: May 30, 2018

Record date: May 31, 2018

Payment date: June 7, 2018

DIVIDEND PAID EUR



* Proposed.

CAPITAL REPAYMENT

In addition to the proposed dividend, ASMI announced on February 28, 2018, that it intends to propose to the 2018 AGM to distribute €4.00 per common share free of any withholding tax. To this end it is proposed that the distribution is effected as a repayment of capital to the shareholders by way of a reduction of the par value of the common shares. Moreover, on the same date ASMI announced that it will propose to the 2018 AGM the cancellation of 6 million treasury shares.

In July 2013, ASMI distributed €4.25 per ordinary share to its shareholders. This followed on the sale of 12% of the total shares in ASMPT in March 2013. The extraordinary return of capital in 2013 was in addition to the dividend paid that year.

SHARE BUYBACK

On September 22, 2017, ASMI announced the start of a new share buyback program of its common shares for the period 2017-2018. This program followed on ASMI's announcement on April 24, 2017, that the proceeds of approximately €245 million of the secondary share placement on that date of a stake of approximately 5% in ASM Pacific Technology were intended to be used for a new share buyback program. The 2017-2018 program will end as soon as the aggregate purchase price of the common shares acquired by ASMI has reached €250 million, but ultimately on November 25, 2018. ASMI strives to complete the program well before that date. The program will in any event take place within the mandate given by the shareholders during the AGM of May 22, 2017.

This share buyback program will be executed by a third party. ASMI has the intention to reduce its capital by cancelling the repurchased shares after having received approval from its shareholders. The repurchase program is part of ASMI's commitment to use excess cash for the benefit of its shareholders. ASMI updates the market on the progress of the share buyback program on a weekly base. This information will also be published on the ASMI website (www.asm.com).

As of December 29, 2017, we bought back approximately 2.6 million shares under the 2017-2018 program at an average price of €56.77 and for a total amount of €150 million. As of March 9, 2018, a total of 4.26 million shares have been bought under this program at an average price of €56.93 for an amount of €243 million.

In 2017, we also completed the €100 million share buyback program 2016-2017. This program was announced on October 26, 2016 – initially for an amount of €50 million – and was increased to €100 million as announced on March 2, 2017. Under the 2016-2017 share buyback program that was completed on August 28, 2017, we repurchased 1,997,522 shares at an average price of €50.06.

Furthermore, ASMI announced on February 28, 2018, that it plans to use €250 million for a new share buyback program.

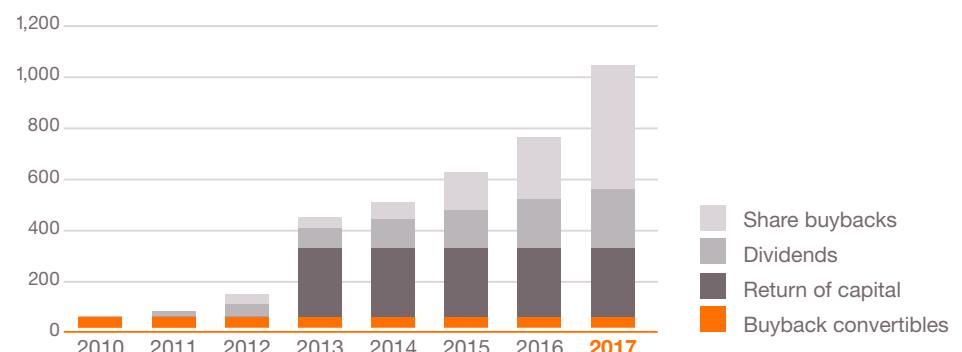
During the whole of 2017, we bought back a total of approximately 4.4 million shares at an average share price of €54.27 and for a total value of approximately €240 million. This compares with a total of approximately 2.7 million bought back in 2016 at an average price of €36.31 and for a total value of €97 million.

The program announced in September 2017 is the fourth consecutive share buyback program. In addition to the 2016-2017 program the earlier programs were:

- › The €100 million share buyback program 2015-2016 that was announced in October 2015. This program started on November 26, 2015 and was completed on November 11, 2016. Under the 2015-2016 share buyback program 2,772,729 shares were repurchased at an average price of €35.98; and
- › The €100 million share buyback program 2014-2015 that was announced in October 2014. This program started on November 24, 2014 and was completed on May 20, 2015. In total, 2,594,420 shares were repurchased at an average price of €38.55, for an amount of €100 million, under this program.

During 2017, we returned approximately €285 million to shareholders in the form of dividends and share buybacks. This was up from €140 million in 2016 and €116 million in 2015. Over the 2010-2017 period, we returned more than €1 billion to the financial markets through dividends, share buybacks, return of capital, and buyback of convertible bonds.

CUMULATIVE CASH RETURNED TO MARKET EUR million



SHARES AND SHAREHOLDERS' RIGHTS

Our shares are listed on the NYSE Euronext Stock Exchange in Amsterdam (symbol: 'ASM') where ASMI is included in the Midcap index. In the US, our shares, held in the form of New York Registry Shares, trade on the OTC market (symbol: 'ASMIY'). Details about our shares and how our shareholders are able to exercise their rights, including information on our Annual and Extraordinary General Meetings of Shareholders, voting rights, and major shareholders in the company, are outlined below.

ANNUAL GENERAL MEETING OF SHAREHOLDERS

ASMI shareholders exercise their rights through Annual and Extraordinary General Meetings of Shareholders. ASMI is required to convene an Annual General Meeting of Shareholders (AGM) in the Netherlands each year, no later than six months after the end of the Company's financial year. Additional Extraordinary General Meetings of Shareholders may be convened at any time by the Supervisory Board or the Management Board.

The convocation date is legally set at 42 days prior to the date of the AGM.

The record date is legally set at 28 days prior to the date of the AGM. Those who are registered as shareholders at the record date are entitled to attend the meeting and to exercise other shareholder rights. Shareholders may be represented by written proxy.

PUBLICATION IN ENGLISH

The Annual Report, the Financial statements and other regulated information such as defined in the Dutch Act on Financial Supervision (Wet op het Financieel Toezicht), will solely be published in English on the Company's website (www.asm.com).

The draft minutes of the AGM are available on the Company's website no later than three months after the meeting. Shareholders may provide their comments in the subsequent three months. Thereafter, the minutes are adopted.

2017 AGM OF ASMI

On May 22, 2017, ASMI held its AGM in Amsterdam, the Netherlands. The attendance rate was 73.0% of the total issued share capital of ASMI as per the registration date. In line with the ASMI Boards' recommendations, the shareholders approved all resolutions as proposed to the AGM. The minutes of the AGM are published on the Company's website.

VOTING RIGHTS

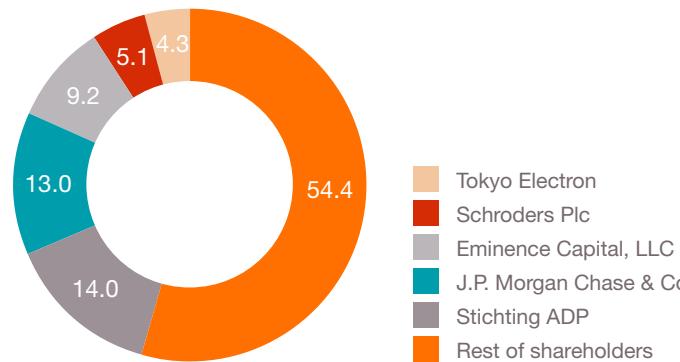
In the AGM, each ordinary share with a nominal value of €0.04 entitles the holder to cast one vote, each financing preferred share with a nominal value of €40.00 entitles the holder to cast one thousand votes and each preferred share with a nominal value of €40.00 entitles the holder to cast one thousand votes. Presently, there are no preferred shares and financing preferred shares outstanding. Treasury shares held by the Company cannot be voted on.

The authorized capital of the Company amounts to 110,000,000 shares of €0.04 par value common shares, 118,000 shares of €40 par value preferred shares and 8,000 shares of €40 par value financing preferred shares, of which 56,140,153 common shares, no preferred and no financing preferred shares were outstanding as at December 31, 2017. All per December 31, 2017 outstanding common shares were fully paid.

Financing preferred shares are designed to allow ASMI to finance equity with an instrument paying a preferred dividend, linked to EURIBOR loans and government loans, without the dilutive effects of issuing additional common shares.

The graph below provides an overview of the shareholders' structure.

VOTING RIGHTS ASMI in %



PREFERRED SHARES

Preferred and financing preferred shares are issued in registered form only and are subject to transfer restrictions. Essentially, a preferred or financing preferred shareholder must obtain the approval of the Company's Supervisory Board to transfer shares. If the approval is denied, the Supervisory Board will provide a list of acceptable prospective buyers who are willing to purchase the shares at a cash price to be fixed by consent of the Supervisory Board and seller within two months after the approval is denied. If the transfer is approved, the shareholder must complete the transfer within three months, at which time the approval expires.

Preferred shares are entitled to a cumulative preferred dividend based on the amount paid-up on such shares. Financing preferred shares are entitled to a cumulative dividend based on the par value and share premium paid on such shares.

STICHTING AGREEMENT

ASMI is party to an agreement with Stichting Continuiteit ASM International (Stichting), pursuant to which Stichting is granted an option to acquire up to a number of our preferred shares corresponding with a total par value equal to 50% of the par value of our common shares issued and outstanding at the date of the exercise of the option. Stichting is a non-membership organization organized under Dutch law. The objective of Stichting is to serve the interests of the Company. For that objective, Stichting may, among other things, acquire, own, and vote our preferred shares in order to maintain our independence and/or continuity and/or identity.

The members of the board of Stichting are:

- › Dick Bouma, Retired Chairman Board Pels Rijcken & Droogleever Fortuijn;
- › Rob Ruijter, former Chairman Supervisory Board Delta Lloyd; and
- › Rinze Veenenga Kingma, President Archeus Consulting BV.

The purpose of above mentioned option is to protect the independence, the continuity and the identity of ASMI against influences that are contrary to the interests of ASMI, its enterprise and the enterprises of its subsidiaries and all stakeholders.

POWERS

The powers of the AGM are defined in our Articles of Association. The main powers of the shareholders are to:

- › appoint, suspend, and dismiss members of the Management Board and Supervisory Board;
- › adopt the financial statements;
- › declare dividends;
- › discharge the Management Board and Supervisory Board from responsibility for the performance of their respective duties for the previous financial year;
- › appoint the external auditors;
- › adopt amendments to the Articles of Association;
- › issue shares and grant subscriptions for shares;
- › authorize the Management Board to issue shares and grant subscriptions for shares;
- › withdraw pre-emptive rights of shareholders upon issuance of shares;
- › authorize the Management Board to withdraw pre-emptive rights of shareholders upon issuance of shares; and
- › authorize the Management Board to repurchase or cancel outstanding shares.

MAJOR SHAREHOLDERS

Pursuant to the Dutch Financial Supervision Act (Wet op het financieel toezicht or WFT), legal entities as well as natural persons must immediately notify the Dutch Authority for the Financial Markets (AFM) when a shareholding equals or exceeds 3% of the issued capital. The AFM must be notified again when this shareholding subsequently reaches, exceeds or falls below a threshold. This can be caused by the acquisition or disposal of shares by the shareholder or because the issued capital of the issuing institution is increased or decreased. Thresholds are: 3%, 5%, 10%, 15%, 20%, 25%, 30%, 40%, 50%, 60%, 75%, and 95%. The AFM incorporates the notifications in the public register, which is available on its website. Failure to disclose the shareholding qualifies as an offense, and may result in civil penalties, including suspension.

The following table sets forth information with respect to the ownership of our common shares as of February 1, 2018, by each beneficial owner known to us of more than 3% of our common shares:

	NUMBER OF SHARES	PERCENT	NUMBER OF VOTING RIGHTS	PERCENT ¹⁾
Stichting ADP ²⁾	8,707,323	14.0%	8,707,323	14.0%
J.P. Morgan Chase & Co ³⁾	8,100,853	13.0%	8,100,853	13.0%
ASM International NV ⁴⁾	6,157,241	9.9%	—	—
Eminence Capital LP ⁵⁾	5,730,674	9.2%	5,730,674	9.2%
Schroders Plc ⁶⁾	—	—	3,172,577	5.1%
Tokyo Electron Ltd. ⁷⁾	2,699,000	4.3%	2,699,000	4.3%

¹⁾ Calculated on the basis of 62,297,400 issued common shares as of February 1, 2018, and without regard to options.

²⁾ The total capital interest of Stichting ADP is held indirectly actual, while of the 8,707,323 voting rights 8,704,284 are held indirectly actual and 3,039 are held indirectly potential. Based on the AFM notification dated September 9, 2016.

³⁾ Of the share capital interest and voting rights held by J.P. Morgan Chase & Co, 423,022 shares are indirectly actual and 7,677,831 are indirectly potential. Based on the notification filed with the AFM on November 2, 2017.

⁴⁾ On December 31, 2017, ASMI held 6,157,241 ordinary shares in treasury. Treasury shares held by the Company cannot be voted on.

⁵⁾ All of the 5,730,674 shares and voting rights of Eminence Capital LP are held directly actual. Based on the notification filed with the AFM on March 17, 2017.

⁶⁾ All of the 3,172,577 voting rights of Schroders Plc are held indirectly actual. Based on the notification filed with the AFM on December 12, 2017.

⁷⁾ All of the 2,699,000 shares in capital interest and voting rights of Tokyo Electron Ltd are held directly actual. Based on the notification filed with the AFM on July 1, 2013.

A ‘beneficial owner’ of a security includes any person who, directly or indirectly, through any contract, arrangement, understanding, relationship, or otherwise has or shares (i) voting power which includes the power to vote, or to direct the voting of, such security and/or (ii) investment power which includes the power to dispose, or to direct the disposition, of such security. In addition, a person shall be deemed to be the beneficial owner of a security if that person has the right to acquire beneficial ownership of such security, as defined above, within 60 days, including but not limited to any right to acquire: (i) through the exercise of any option, warrant or right; (ii) through the conversion of a security; or (iii) pursuant to the power to revoke, or pursuant to the automatic termination of, a trust, discretionary account, or similar arrangement.

KEY DATES

Our key investor dates are listed below. An up-to-date investor calendar is available on our website.

ANNUAL GENERAL MEETING OF SHAREHOLDERS

The Annual General Meeting of Shareholders will be held on May 28, 2018.

APRIL 19, 2018

Announcement of first quarter results 2018

JULY 24, 2018

Announcement of second quarter results 2018

OCTOBER 31, 2018

Announcement of third quarter results 2018

KEY FIGURES

KEY FIGURES PER SHARE

The table below shows the key figures per share and other relevant share data for the last three years.

(EUR, except number of shares)	2015	2016	2017
Net earnings per share, diluted	2.50	2.21	7.63
Normalized net earnings per share, diluted	2.93	2.65	3.21
Dividend per share	0.60	0.70	0.70
Shareholders' equity	31.58	33.70	35.83
Issued shares year-end (thousand)	63,797	63,797	62,297
Outstanding shares year-end (thousand)	61,706	59,816	56,140
Average outstanding shares basic (thousand)	62,114	60,616	58,573
Average outstanding shares diluted (thousand)	62,928	61,253	59,325
Closing share price Euronext Amsterdam			
Year-end	36.16	42.64	56.37
High	45.91	43.05	62.27
Low	27.57	32.14	42.07
Market capitalization year-end (EUR million)	2,231	2,551	3,165

CONTACT INFORMATION

OPEN DIALOG AND TIMELY INFORMATION

We maintain an open dialog with our shareholders and investors. We provide the financial markets with accurate and timely information through, among other things, press releases, our annual reports, quarterly earnings calls and webcasts and investor meetings. Investors can find up-to-date and comprehensive information about the company and our shares on our website.

VICTOR BAREÑO

Almere, the Netherlands

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GENERAL INFORMATION

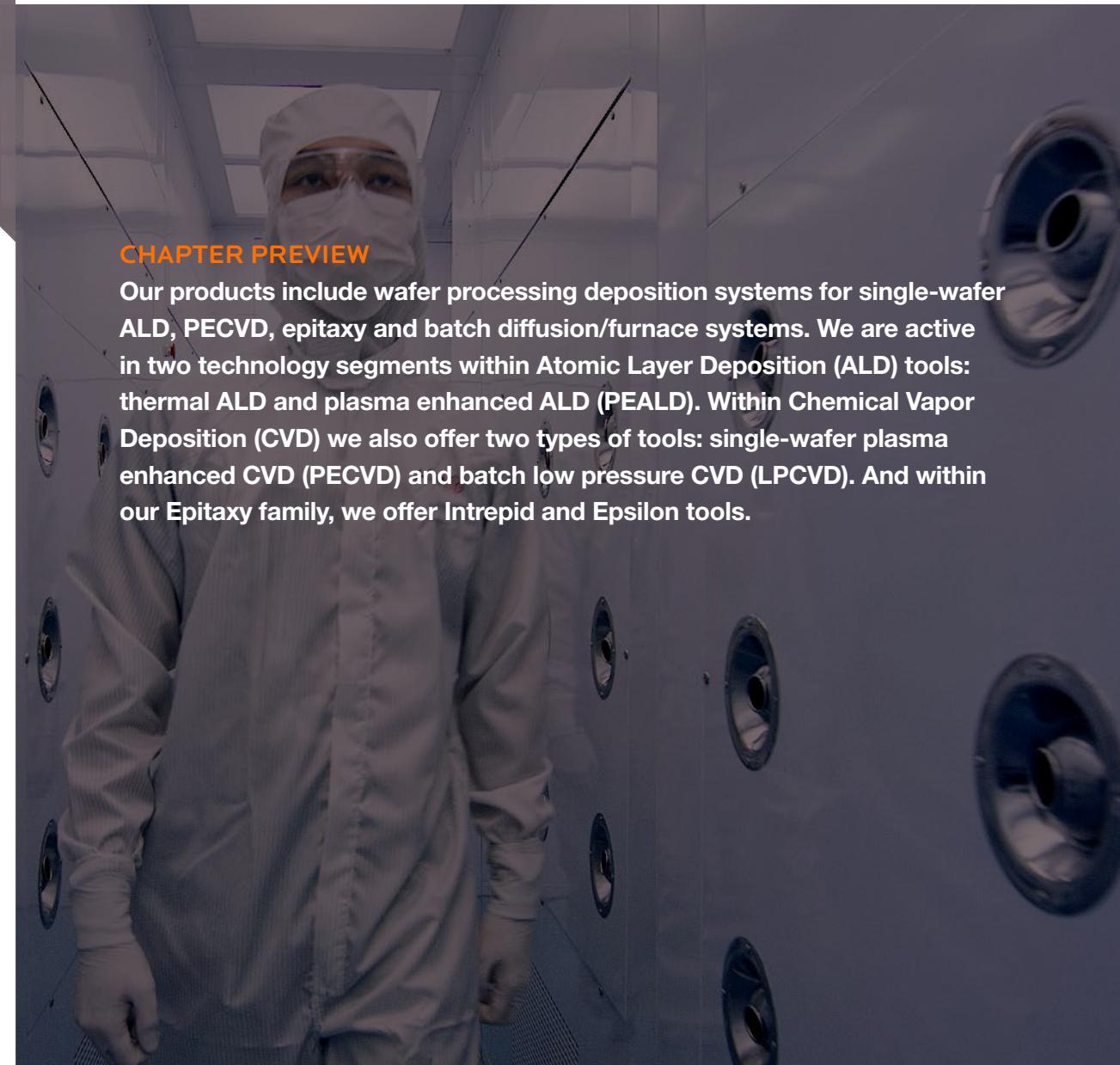
CHAPTER PREVIEW

GENERAL INFORMATION

- Product description
- Declarations
- Other information
- Non-financial data glossary
- Definitions and abbreviations
- Locations worldwide
- Safe harbor statement
- Privacy statement

CHAPTER PREVIEW

Our products include wafer processing deposition systems for single-wafer ALD, PECVD, epitaxy and batch diffusion/furnace systems. We are active in two technology segments within Atomic Layer Deposition (ALD) tools: thermal ALD and plasma enhanced ALD (PEALD). Within Chemical Vapor Deposition (CVD) we also offer two types of tools: single-wafer plasma enhanced CVD (PECVD) and batch low pressure CVD (LPCVD). And within our Epitaxy family, we offer Intrepid and Epsilon tools.



PRODUCT DESCRIPTION

Our products include wafer processing deposition systems for single-wafer ALD, PECVD, epitaxy and batch diffusion / furnace systems.

TECHNOLOGY – PRODUCT MATRIX

DEPOSITION APPLICATION	ASMI PRODUCT PLATFORM	ASMI PRODUCTS	PROCESS APPLICATION
ALD	XP ¹	Pulsar XP ALD system EmerALD XP ALD system	High-k gate dielectric Metal gate electrode
PEALD	XP8 ¹	Eagle XP8 PEALD system	Spacer for multipatterning Gate spacer Etch stop
PECVD	XP8 ¹	Dragon XP8 PECVD system	Inter-layer dielectric Silicon nitride
Diffusion Oxidation LPCVD ALD	Advance Series	A400 batch vertical furnace system A412 batch vertical furnace system	Furnace: - Diffusion, oxidation - Polysilicon - Silicon nitride
Epitaxy	XP ¹	Intrepid ES epitaxy	Silicon channel Strain layer
	Epsilon	Epsilon 2000 single wafer epitaxy system Epsilon 3200 single wafer epitaxy system	

¹ The XP is our standard single wafer processing platform designed to accommodate multiple process application modules with common platform standards. In 2012 ASMI launched the XP8 high productivity platform for PECVD and PEALD, based on our common XP platform standard with an expanded configuration that enables integration of up to eight chambers on one wafer handling platform.

PRODUCT APPLICATIONS AND DESCRIPTIONS

Atomic Layer Deposition (ALD)

ASMI offers ALD tools in two technology segments: thermal ALD and plasma enhanced ALD (PEALD).

Pulsar XP ALD system

Pulsar XP is a 300mm thermal ALD tool designed for depositing extremely thin high-k dielectric materials required for advanced transistor gates and other applications. Pulsar is the benchmark ALD and high-k gate dielectric tool for the industry. Up to four Pulsar process modules can be configured on a Pulsar XP system.

EmerALD XP ALD system

EmerALD XP is a 300mm thermal ALD tool designed for depositing metal gate layers for advanced high-k metal gate transistors and other applications. Up to four EmerALD process modules can be configured on an EmerALD XP system.

Eagle XP8 PEALD system

Eagle XP8 is a high-productivity 300mm tool for PEALD applications. The system can be configured with up to four Dual Chamber Modules (DCM), enabling eight chambers in high-volume production within a very compact footprint. The system is capable of a broad range of dielectric PEALD processes, including low-temperature spacers for multiple patterning applications.

Advance series batch vertical furnace

The Advance is our batch vertical furnace tool, available as the A412 for 300mm wafers and as the A400 for smaller wafer sizes. Various thermal ALD films can be deposited on the batch furnace for high productivity.

Chemical Vapor Deposition (CVD)

We offer two types of CVD tools: single-wafer plasma enhanced CVD (PECVD) and batch low pressure CVD (LPCVD).

Dragon XP8 PECVD system

Dragon XP8 is a high-productivity 300mm tool for PECVD applications. The system can be configured with up to four Dual Chamber Modules (DCM), enabling eight chambers in high-volume production within a very compact footprint. Processes include a broad range of dielectric PECVD films for applications such as interconnect dielectrics layers, passivation layers, and etch stop layers.

Advance series batch vertical furnace

The Advance is our batch vertical furnace tool, available as the A412 for 300mm thermal LPCVD and as the A400 for LPCVD on smaller wafer sizes. CVD applications on the furnace include polysilicon, silicon nitride, and silicon oxide.

Epitaxy

We offer two families of Epitaxy tools: Intrepid and Epsilon.

Intrepid epitaxy system

Intrepid ES is a 300mm epitaxy tool using our XP platform, and is designed for depositing critical transistor strain and channel layers. Processes include silicon (Si), silicon-germanium (SiGe), silicon-carbon (SiC), and other silicon-based compounds. Up to four Intrepid process modules can be configured on an Intrepid ES system.

Epsilon epitaxy system

The Epsilon series is a single-wafer, single-chamber tool that deposits silicon-based materials for many applications, ranging from high-temperature silicon for wafer manufacturing, to low-temperature silicon, silicon-germanium (SiGe), silicon-carbon (SiC), and other silicon-based compounds. Epsilon is the market leader for epitaxy applications in the analog and power devices market.

Diffusion

We offer batch vertical furnace tools for diffusion and oxidation applications.

Advance series batch vertical furnace

The Advance is our batch vertical furnace tool series, available as the A412 for 300mm and as the A400 for smaller wafer sizes. Atmospheric thermal applications on the furnace include diffusion to introduce dopants in materials in controlled amounts, annealing to affect material properties by heating to a specific temperature and oxidation to form silicon oxide.

Service and spare parts

Service and spare parts are important product offerings for our business. We provide service support to our customers with technical service personnel who are trained to maintain our systems at customers' fabrication plants around the world. Our service team is located globally at regional and local service centers to assure prompt availability.

We sell spare parts for our equipment from parts stocks located at global distribution centers.

DECLARATIONS

COMPLIANCE WITH DUTCH CORPORATE GOVERNANCE CODE

The Dutch Corporate Governance Code was last amended on December 8, 2016. As of 2018, Dutch listed companies are required to report for the first time on compliance with the revised Code for the financial year 2017. The full text of the Dutch Corporate Governance Code can be found on the website of the Monitoring Commission Corporate Governance Code (www.mccg.nl).

ASMI applies the relevant principles and best practices of the revised Code applicable to the Company, to the Management Board, and to the Supervisory Board, in the manner set out in the Corporate Governance section, as long as it does not entail disclosure of commercially sensitive information, as accepted under the Code.

ASMI agrees with principle 3.2.3 of the Code that in most circumstances a maximum severance payment of one year for Management Board members is appropriate. However, we want to reserve the right to agree to different amounts in case we deem this to be required by the circumstances. Any deviations will be disclosed.

RESPONSIBILITY STATEMENT

The members of the Management Board state that, to the best of their knowledge, the statutory financial statements prepared in accordance with IFRS-EU and Title 9 of part 2 of the Dutch Civil Code as included in this Annual Report 2017 provide a true and fair view of the assets, liabilities, financial position, and results of the Company and its subsidiaries included in the consolidated statements and that the management report provides a true and fair view of the position and the business of the Company and its subsidiaries, and the Annual Report 2017 provides a description of the principal risks and uncertainties that the Company faces.

CORPORATE GOVERNANCE STATEMENT

ASMI complies with the Corporate Governance Code. All required information is part of this Annual Report.

Corporate governance-related documents are available on our website. These include the Supervisory Board Profile, Supervisory Board Rules, Management Board Rules, the Audit Committee Charter, the Nomination, Selection and Remuneration Committee Charter, the Code of Ethics, the Whistleblower Policy, the Anti-Fraud Policy, the Rules concerning Insider Trading, and the Remuneration Policy.

ARTICLE 10 EU TAKEOVER DIRECTIVE DECREE

The Management Board states that the information required under Article 10 of the EU Takeover Directive Decree is disclosed in this Corporate Governance chapter to the extent that it is applicable to ASMI.

OTHER INFORMATION

The additional information below includes a brief summary of the most significant provisions of our Articles of Association.

INFORMATION ON THE PROVISIONS IN THE ARTICLES OF ASSOCIATION RELATING TO THE APPROPRIATION OF PROFIT

The Articles of Association of ASM International NV (the Company) provide the following with regard to distribution of profit and can be summarized as follows:

- › From the profits, distributions shall in the first place, if possible, be made on the preferred shares equal to the EURIBOR-rate for six months' loans, increased by one and a half, on the paid-up amount which had to be paid on the preferred shares, weighted to the number of days to which this was applicable. If profits are insufficient, the dividend will be paid from the reserves with priority over any dividends. If the reserves are insufficient, the dividend deficit has to be made up in future years;
- › Second, a dividend, if possible, is distributed on financing preferred shares. The dividend is a percentage of the par value, plus share premium paid, on the financing preferred shares. The percentage is determined by the Management Board, subject to approval of the Supervisory Board. The percentage is related to the average effective yield on government loans with a weighted average remaining term of no more than ten years, if necessary increased or decreased by no more than three percent, subject to the then prevailing market conditions. If profits are insufficient, the dividend shall be paid from the reserves. If the reserves are insufficient, the dividend deficit has to be made up in future years;
- › With the approval of the Supervisory Board, the Management Board will determine which part of the profit remaining after adoption of the provisions of the previous paragraphs will be reserved. The profit after reserving will be at the disposal of the Annual General Meeting of Shareholders;
- › The Company may only make distributions to the shareholders and other persons entitled to profit insofar as its equity exceeds the amount of the paid-up and called amounts of the share capital increased with the reserves that must be kept by virtue of law; and
- › Article 33, para 3 of the Articles of Association provides that dividend claims expire after the lapse of five years.

THE PROPOSED APPROPRIATION OF THE RESULT

It is proposed that net earnings for the year 2017 are carried to the accumulated deficit/net earnings.

SPECIAL STATUTORY CONTROL RIGHTS

Article 27 of the Articles of Association provides that each common share gives the right to cast one vote, each preferred financing share to cast one thousand votes, and each preferred share to cast one thousand votes.

Article 29 of the Articles of Association provides that meetings of holders of preferred shares or of financing preferred shares shall be convened as often and insofar as a decision of the meeting of holders of preferred shares or financing shares desires this, and furthermore as often as the Management Board and/or the Supervisory Board shall decide to hold such a meeting. At the meeting, resolutions will be passed with an absolute majority of the votes. In the event that there is a tie of votes, no resolution will take effect.

The following resolutions and actions can only be taken on a proposal by the Management Board and the Supervisory Board:

- › the amendment of the Articles of the Company; and
- › the dissolution of the Company.

STICHTING CONTINUÏTEIT ASM INTERNATIONAL

The objective of Stichting Continuïteit ASM International (Stichting) is to serve the interests of the Company. To that objective Stichting may, amongst others, acquire, own and vote on our preferred shares in order to maintain our independence and/or continuity and/or identity.

The members of the board of Stichting are:

- › Dick Bouma, retired Chairman Board Pels Rijcken & Droogleever Fortuyn;
- › Rob Ruijter, Chairman Supervisory Board Delta Loyd;
- › Rinze Veenenga Kingma, President Archeus Consulting BV.

SUBSEQUENT EVENTS

Subsequent events were evaluated up to March 16, 2018, which is the issuance date of this Annual Report 2017. There are no subsequent events to report.

ANNUAL REPORT

The Annual Report, prepared in accordance with International Financial Reporting Standards (IFRS), is available free of charge by writing to our corporate offices, sending an email to investor.relations@asm.com or downloading the file through our website.

NON-FINANCIAL DATA GLOSSARY

All boundary scopes are for ASMI Front-end unless noted

INDICATORS	DEFINITIONS	SECTION COVERED
Staff (Employee)	Employee is a person with a fixed contract excluding temporary labor. Definition may be varied by country per local and country labor law. The # of employees at the last day of the reporting period	People and society
Employees in R&D	Employees on the last day of the reporting period whose work is directly related to the research and development of the product during the reporting year	Research and development
Patent filings	Total number of patent applications filed and applied with patent offices globally by ASMI for the invention described	Research and development
Employees based on nationalities	The number of nationalities of employees on the last reporting day of the period	People and society
Employees covered by collective bargaining agreements	% of employees that are covered by collective bargaining agreements per local labor requirement divided by the total number of employees at reporting year-end	People and society
Reported concerns from anonymous global reporting program SpeakUp!	The number of questions / remarks / concerns reported to the Ethics Office related to a potential violation of the Code of Conduct and Business Policies via reporting tool SpeakUp! in the reporting period	People and society
Voluntary turnover rate	Turnover rate is the percentage of employees in a workforce that leave voluntarily during this reporting period	People and society
Recordable injury rate	The Recordable injury rate measures cases that require a response greater than first aid (or serious injuries) per 100 employees in reporting period	People and society
Injury rate	The injury rate is a measure of all first aid or greater injuries per every 100 employees in reporting period	People and society
Number (#) of employees completing bi-annual Ethics training	All employees completing the online compliance training courses bi-annually during our compliance month within the reporting year. We track # of employees and % of the total that completed the training. It is applicable to all employees	People and society
Ethics concerns reported from anonymous global reporting program SpeakUp!	The # of any ethics concerns reported by employees through our anonymous employee reporting channel SpeakUp!; that may be related to a potential violation of the Code of Conduct and Business Principles or Policies in the reporting year	People and society
Ethics concerns reported through other channels	The # of any ethics concerns reported by employees through other means including directly to management or the Compliance Officer, that may be related to a potential violation of the Code of Ethics and Business Principles or Policies in the reporting year	People and society

INDICATORS	DEFINITIONS	SECTION COVERED
Responsible Business Alliance (RBA)	We adopted the industry standard RBA Code of Conduct. More detail about the code can be find at http://www.responsiblebusiness.org/standards/code-of-conduct/	Corporate Responsibility Strategy
Self-assessment Questionnaire (SAQ) risk rating/result	We adopted the RBA standard tool for risk assessment Self-Assessment Questionnaire (SAQ) to assess our own and supply chain risk. This rate apply to our own operation SAQ results with our major sites	Corporate Responsibility Strategy
Critical Suppliers	Suppliers that are determined to be critical to our business either because the business spends, or critical components or critical materials, or strategic technical partnership	Supply chain
Supply chain spend by region	Total amount of Euro spent with our global suppliers for the materials, components and services that are used to produce our products and services for our customers and for non-product related products services that enable our operations globally in the reporting period	Supply chain
Critical Supplier Commitment %	Percent of critical suppliers that have acknowledge their commitment to RBA code or whose code of conduct is assessed to be acceptable as it covers the similar principles of the RBA Code of Conduct	Supply chain
Critical suppliers' low medium risk rank based on Self-assessment Questionnaire (SAQ) result	Percent of critical supplies who completed the required Supplier Self-Assessment Questionnaire and resulted with low and medium risks	Supply chain
Supply chain spends per region (in Euro and %)	Total Euro amount we spent and equivalent to the % of total spends with suppliers by each region	Supply chain
Greenhouse Gas (GHG) emissions	# of metric tons of CO ₂ equivalent emissions including both the direct CO ₂ equivalent emissions (scope 1) and indirect CO ₂ equivalent emissions (scope 2) in the reporting period	Environment
Water consumption	Total amount of water consumption in cubic meters for the reporting period	Environment
Landfill diversion rate	The percentage of solid waste diverted from landfill via recycling and reuse efforts in the reporting period as generated at ASMI major Manufacturing, Engineering and R&D sites.	Environment

DEFINITIONS AND ABBREVIATIONS

AENEAS: AENEAS is an association, established in 2006, providing unparalleled networking opportunities, policy influence & supported access to funding to all types of RD&I participants in the field of micro- and nanoelectronics enabled components and systems.

AGM: Annual General Meeting of Shareholders (AGM) is the annual general meeting of shareholders.

ALD: Atomic Layer Deposition (ALD) is a surface-controlled layer-by-layer process that results in the deposition of thin films one atomic layer at a time. Layers are formed during reaction cycles by alternately pulsing precursors and reactants and purging with inert gas in between each pulse.

BCP: Business Continuity Plan.

CAP: Corrective Action Plan.

CFSI: Conflict-Free Sourcing Initiative (<http://www.conflictfreesourcing.org>).

CMRT: The CFSI Conflict Minerals Reporting Template (CMRT) is an industry widely adopted standard template used by companies to collect conflict minerals due diligence data.

Conflict Minerals/3TG: Tin, tantalum, tungsten and gold.

CONNECT!: ASMI's internal newsletter.

COSO: The Committee of Sponsoring Organizations of the Treadway Commission (COSO) is a joint initiative of five private sector organizations listed that is dedicated to providing thought leadership through the development of frameworks and guidance on enterprise risk management, internal control and fraud deterrence.

CR: Corporate Responsibility.

CVD: Chemical Vapor Deposition (CVD) is a chemical process used to produce high quality, high-performance, solid materials. The process is often used in the semiconductor industry to produce thin films. In typical CVD, the wafer (substrate) is exposed to one or more volatile precursors, which react

and/or decompose on the substrate surface to produce the desired deposit. Frequently, volatile by-products are also produced, which are removed by gas flow through the reaction chamber.

DCM: Dual Chamber Module.

DFX: Term used interchangeably, where the X is a variable which can have one of many possible values, such as design for manufacturability, power, variability, cost, yield, reliability, or sustainability (DFS).

DRAM: Dynamic Random Access Memory.

DRC: The Democratic Republic of Congo.

ECO: Engineering change order.

EHS: Environmental, Health & Safety.

EICC: The Electronic Industry Citizenship Coalition (EICC) is the former name of the Responsible Business Alliance (RBA). The RBA rebranded from EICC in 2017.

Epitaxy (EPI): Epitaxy is one of a portfolio of wafer processing technologies for which we provide equipment. The word comes from the Greek epi meaning above, and taxis meaning in an ordered manner. It involves the deposition of silicon or silicon compounds to form layers that help to continue and perfect the crystal structure of the bare silicon wafer below. Epitaxy improves the electrical characteristics of the wafer surface, making it suitable for highly complex microprocessors and memory devices. Selective Epitaxy is an Epitaxy process that only deposits silicon or a silicon compound on certain predetermined areas of the wafer.

FinFET: A Field Effect Transistor (FET) architecture that uses a raised channel, referred to as a fin, from source to drain. A FinFET is considered a 3D transistor since the channel is in a vertical orientation.

FLBL: Forced Labor/Bonded Labor.

FMEA: Failure Mode Effects Analysis.

GES: ASMI's Global Employment Standards.

GRI: The Global Reporting Initiative (GRI) is an international independent standards organization that helps businesses, governments and other organizations understand and communicate their impacts on issues such as climate change, human rights and corruption (www.globalreporting.org).

IC: Integrated Circuit.

IFRS: International Financial Reporting Standards.

ILO: International Labor Organization.

imec: imec is an internationally renowned research institute that performs research in different fields of nanoelectronics. It is headquartered in Leuven, Belgium, and has offices in the Netherlands, Taiwan, US, China, India, Nepal and Japan.

IoT: Internet of Things.

IP: Intellectual Property.

ISO 14001: The ISO 14001 Environment Management System (EMS) standard is an internationally recognized environmental management standard.

NCG: New College Graduate (NCG).

NGOs: Non-Government Organizations.

LPCVD and Oxidation/Diffusion: Low Pressure Chemical Vapor Deposition (LPCVD) is a thermal process that deposits various films at low pressure. LPCVD processes include polysilicon, silicon nitride and silicon oxides. Diffusion (sometimes referred to as annealing) is a thermal treatment used to move dopants, or impurities, and make dopants introduced by ion implantation electrically active. Oxidation forms a silicon oxide layer on the wafer's surface, which acts as an insulating or protective layer over it.

NAND: A type of nonvolatile memory device technology which does not require power to retain its data. NAND flash memory is used in mobile phones, USB memory drives, solid state drives and other electronic products.

OECD: OECD (Organization for Economic Cooperation and Development) is an international organization helping governments tackle the economic, social and governance challenges of a globalized economy. It publishes guidance and frameworks such as OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

PEALD: Plasma Enhanced ALD (PEALD) uses specific chemical precursors just like in thermal ALD. However, it also makes use of cycling an RF-plasma to create the necessary chemical reactions in a highly controlled manner.

PECVD: Plasma Enhanced Chemical Vapor Deposition (PECVD) is the CVD that utilizes plasma to enhance chemical reaction rates of the precursors. PECVD processing allows deposition at lower temperatures, which is often critical in the manufacture of semiconductors. The lower temperatures also allow for the deposition of organic coatings, such as plasma polymers, that have been used for nanoparticle surface functionalization.

PLC: Product Life Cycle.

R&D: Research and Development.

RBA: Responsible Business Alliance – Industry coalition seeking to create a industry-wide standards on social, environmental and ethical issues in the industry supply chain. Rebranded from the Electronics Industry Citizenship Coalition (EICC) in October 2017.

RCOI: Reasonable Country of Origin Inquiries (RCOI).

SAQ: Self-Assessment Questionnaire (SAQ) is one of the EICC's standardized risk assessment tools.

SDG: United Nations Sustainable Development Goals.

SEAJ: Semiconductor Equipment Association Japan.

SEMI: Semiconductor Equipment and Materials International (SEMI) is a global industry association of companies that provide equipment, materials and services for the manufacture of semiconductors, photovoltaic panels, LED and flat panel displays, micro-electromechanical systems (MEMS), and related micro and nanotechnologies.

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SAFE HARBOR STATEMENT

In addition to historical information, some of the information posted or referenced herein or on the website contains statements relating to our future business and/or results, including, among others, statements regarding future revenue, sales, income, expenditures, sufficiency of cash generated from operations, maintenance of interest in ASM Pacific Technology Ltd, business strategy, product development, product acceptance, market penetration, market demand, return on investment in new products, facility completion dates and product shipment dates, corporate transactions, restructurings, liquidity and financing matters, outlooks, and any other non-historical information. These statements include certain projections and business trends, which are 'forward-looking'. We caution readers that no forward-looking statement is a guarantee of future performance and that actual results could differ materially from those contained in the forward-looking statements.

You can identify forward looking statements by the use of words like 'may', 'could', 'should', 'project', 'believe', 'anticipate', 'expect', 'plan', 'estimate', 'forecast', 'potential', 'intend', 'continue', and variations of these words or comparable words.

Forward-looking statements do not guarantee future performance and involve risks and uncertainties. You should be aware that our actual results may differ materially from those contained in the forward-looking statements as a result of certain risks and uncertainties. These risks and uncertainties include, but are not limited to, economic conditions and trends in the semiconductor industry and the duration of industry downturns, currency fluctuations, the timing of significant orders, market acceptance of new products, competitive factors, litigation involving intellectual property, shareholder or other issues, commercial and economic disruption due to natural disasters, terrorist activity, armed conflict or political instability, epidemics and other risks indicated in our most recently filed Statutory Annual Report and other filings from time to time. The risks described are not the only ones. Some risks are not yet known and some that we do not currently believe to be material could later become material. Each of these risks could materially affect our business, revenues, income, assets, liquidity, and capital resources. All statements are made as of the date of posting unless otherwise noted, and we assume no obligation to update or revise any forward-looking statements to reflect future developments or circumstances.

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ASMI is committed to protecting the privacy of the users of this website. This policy describes how ASMI collects and uses personally identifying information of users of our website. If you choose to give us personal information, we will treat it according to this policy. ASMI encourages you to read this privacy policy and those of all websites you visit.

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In general, when you visit our website and access information, you will remain anonymous. For some services provided through our website, we will ask you to register using online registration forms. A registration form will ask for information both about the company to be registered and the individual employees who will use our online services as representatives of the company. For some website services, you will be asked to provide a password and user identification. This information is collected to confirm eligibility for use of the online services, to establish the identity of the company and authorized users, and for business contact purposes. Some services available on our website involve the purchase of ASMI equipment or spare parts by our customers. If you elect to engage in e-commerce transactions on our website, you will be asked to provide information necessary to facilitate transactions such as shipping address and payment instructions. In addition to information you provide, ASMI may collect information about your use of our website that will help ASMI improve its online services (for example, the pages you access on our sites, the name of your Internet Service Provider, the site that referred you to the website, what browser you are using, your IP address, etc.). This information may be used to analyze trends and statistics and monitor link usage. If you choose to post messages in message areas or to provide feedback or send an email to us, we may keep a record of that posting or correspondence. Information you disclose in a public message area will naturally be available to and shared with other users of our website. ASMI will only use your personal information in the ways specified when it was collected. We will not subsequently change the way in which we use your personal information, unless you consent to the new usage.

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We want to know you better so we can serve you better. However, the choice whether you want this kind of service is up to you. You should know that your personally identifiable information may be transferred from your home country to other ASMI companies around the world who may communicate with you about our products or special offers you may find useful. Your data may also be transferred to countries outside the European Union. When you place an order or otherwise participate in an e-commerce transaction opportunity, we will use your personally identifiable information to facilitate the transaction. ASMI may also maintain transaction history information about our website users. The primary use of your information is to enable ASMI to deliver specific services or products you request or to complete a transaction initiated by you. During the course of completing a transaction initiated by you, ASMI may provide your contact or other information to a trading partner or other party to the transaction (e.g. financier or bank).

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ASMI uses industry standard efforts to safeguard the confidentiality of your personally identifiable information. Access to your personal information is limited to ASMI employees and authorized third party agents (e.g. shipping companies) who need it to do their job. We only provide third party agents with the minimum amount of information needed to complete the requested service or transaction. We do not otherwise share your personal information with third parties, unless you have granted us permission to do so. Unfortunately, it is impossible to absolutely guarantee the security of data transmission over the internet or any wireless network. Therefore, although we take reasonable measures to protect your information, ASMI cannot ensure the security of any information you transmit to us or from online services and you do so at your own risk. Once we receive your transmission, we will use industry standard efforts to ensure its security on our systems.

DATA RETENTION

ASMI will not retain your personal information longer than is necessary for the purposes for which it was collected.

LINKED WEBSITES

We provide links to third party websites. Since we do not control these third party websites, we encourage you to review the privacy policies posted on these websites.

CHILDREN'S PRIVACY

We do not knowingly collect personal information from children under the age of 13. If we learn that we have personal information on a child under the age of 13, we will delete that information from our systems.

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All updates to this policy will be posted here. Last update: April 9, 2015.

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