ANNUAL GENERAL MEETING OF SHAREHOLDERS 2020

Chuck del Prado, President & CEO
May 18, 2020
Cautionary Note Regarding Forward-Looking Statements:

All matters discussed in this presentation, except for any historical data, are forward-looking statements. Forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those in the forward-looking statements. These include, but are not limited to, economic conditions and trends in the semiconductor industry generally and the timing of the industry cycles specifically, currency fluctuations, corporate transactions, financing and liquidity matters, the success of restructurings, the timing of significant orders, market acceptance of new products, competitive factors, litigation involving intellectual property, shareholders or other issues, commercial and economic disruption due to natural disasters, terrorist activity, armed conflict or political instability, epidemics and other risks indicated in the Company’s reports and financial statements. The Company assumes no obligation nor intends to update or revise any forward-looking statements to reflect future developments or circumstances.
AGENDA

COVID-19 RESPONSE AND IMPACT

BUSINESS AND RESULTS REVIEW 2019

FINANCIAL HIGHLIGHTS 2019

ESG AND OPERATIONAL EXCELLENCE

CURRENT MARKET TRENDS AND OUTLOOK

ASM PERFORMANCE IN THE PAST 12 YEARS
Health and safety of our employees, families and business partners is our key priority. Necessary measures, e.g. enabling work from home and split-shift work, are taken.

Strong commitment of ASM employees and business partners shown. We were able to ship nearly all tools as planned within Q1 2020.

Parts of the semiconductor market negatively impacted in Q1 2020 (such as smartphones and automotive), but strong demand in parts that support work from home and virtual learning (servers).

Customer equipment demand remained strong; no meaningful order cancellations or push outs in Q1 2020. COVID-19 created challenges in supply chain and logistics.
WAFFER FAB EQUIPMENT BY INDUSTRY SEGMENT (US$ BILLION)

- ASMI estimates 2019 WFE decreased high single digits %
- Strong growth in logic/foundry
- Memory spending weak in cyclical decline

Source: VLSI Research, April 2020
ASM REVENUE GREW 57%  
(37% excluding settlement proceeds)

- We strongly outperformed the WFE market which declined by a high single digit percentage in 2019
- ALD grew strongly and continued to account for over half of our total equipment revenue
- Solid double digit sales increases in other product lines, led by Epitaxy and PECVD
- Also our Spares and Services business showed a healthy 15% growth
• Logic/foundry sales grew strongly in 2019, driven by solid investments in the advanced nodes whereby our share of wallet at the 10nm logic and 5nm foundry nodes increased substantially.

• Our memory sales were flat in a sharply lower market, as we benefited from a number of customer specific projects.

• Largest part of our sales are driven by leading edge node investments.

• 2019 showed a strong double digit growth of our China activities.

• Further strengthened R&D engagements with key customers.
SYNERGIS® ALD INCREASING MARKET PENETRATION

Expanding ALD Served Available Market with thermal ALD solutions for Logic/Foundry & Memory

- Synergis demand strong in 2019 following 2018 launch
- Wide range of films allows us to address more ALD applications
- Leverages HVM proven XP8 platform
- New dual-chamber thermal ALD reactor technology evolved from decades of ALD expertise on Pulsar and EmerALD
We improved our Epi position in the foundry segment going from 7nm to 5nm

• ASM’s Epi market share increased in 2019
• Previum® pre-clean steps are critical to enable high-quality Epi film growth in 5nm devices and beyond
• Continued healthy contribution from analog and power
A400™ DUO VERTICAL FURNACE LAUNCHED IN 2019

Addressing growth in Power, Analog, RF, and MEMS

• Wide range of 200mm furnace applications
• Qualified for production at multiple customers in Europe, US and Asia. Multiple penetrations in China
NET SALES
€ million

2018
187
632

2019
159
215
910

Settlement proceeds
Spares & Service sales
Equipment sales
FINANCIAL HIGHLIGHTS 2019

OPERATING RESULT

€ million

2018: 124
2019: 220

159

Settlement proceeds
Result excl. settlement proceeds
FINANCIAL HIGHLIGHTS 2019

NET RESULT
€ million

2018
48
109

2019
325
4

- Result from investments
- Net result excl. ASMPT
AMOUNTS IN € MILLION

FINANCIAL HIGHLIGHTS 2019

CASH FLOW BRIDGE

- Net cash end 2018: 286
- Net cash end 2019: 498
- Free cash flow: 206
- Dividend received from ASMPT: 173
- Dividend to ASMI shareholders: -99
- Share buybacks: -100
- Other: 32

'Other' includes €159 million in proceeds from settlements
SHAREHOLDER REMUNERATION
DIVIDEND PER SHARE IN € PAID OVER

* Proposed

Regular dividend
Extra-ordinary dividend
CUMULATIVE CASH RETURNED TO MARKET ’10–’19
(€MILLION)
GLOBAL INJURY RATES – STRIVING FOR ZERO HARM!

- **Injury rate**
  - Improved from 2018:
  - 22.3%

- **Recordable Injury rate**
  - Improved from 2018:
  - 6.7%

* Injuries requiring > first aid, restricted duty, or lost work days, rate per 100 employees
GLOBAL ASM WATER CONSUMPTION

- Phoenix water reuse plant functional, 5.5% absolute global reduction (from 2018)
- Normalized objective of 45% reduction from 2015 baseline maintained
- Recognition awards received – Phoenix Utility (SRP) and SEAL award

![Chart showing water consumption from 2015 to 2020](chart.png)

**Absolute Water Consumption (m³)**

- 2015: 150,000
- 2016: 120,000
- 2017: 100,000
- 2018: 813
- 2019: 0

**m³/million € R&D spend**

- Revised target: 45% below 2015 baseline

2020: 1,037
## ESG AND OPERATIONAL EXCELLENCE

### ASM LONG-STANDING COMMITMENT TO CORPORATE RESPONSIBILITY

<table>
<thead>
<tr>
<th>Year</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>Adopted Electronic Industry Citizenship Coalition (EICC) tenets</td>
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</table>
| 2014 | Adopted EICC tenets as Supply Chain Code of Conduct  
- 100% of Strategic and Critical suppliers have formally committed |
| 2016 | Became member of the Responsible Minerals Initiative (RMI), active in key workgroups  
- 100% of Strategic and Critical suppliers reporting |
| 2017 | EICC → Responsible Business Alliance (RBA) to broaden industry engagement and reach |
| 2019 / early 2020 | Co-sponsored Living Wage amendment to RBA Code of Conduct  
- Respecting the right of workers to earn a living wage |
| 2020 | ASM took the next logical step in our long-standing commitment to the tenets of the Responsible Business Alliance (RBA) by becoming a member |
Customer Awards

Intel 2019 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.
- To qualify for PQS status, suppliers must exceed high expectations and uncompromising performance goals.
CUSTOMER AWARDS

TSMC Excellent Performance award 4th consecutive year

The award was received by ASM in recognition of its technology collaboration with TSMC.

TSMC explained three points that contributed to the award:

1) Outstanding development support
2) Continuous efforts in productivity improvement
3) Excellent delivery support on production ramp
CURRENT MARKET TRENDS AND OUTLOOK
CURRENT MARKET TRENDS AND OUTLOOK

SEMICONDUCTORS SALES BY KEY APPLICATION (US$ BILLION)
Long term semi growth drivers are solid state drives, servers, automotive and industrial

Source: Gartner, April 2020
CURRENT MARKET TRENDS AND OUTLOOK

WAFER FAB EQUIPMENT BY TECHNOLOGY NODE (US$ BILLION)

Source: Gartner, April 2020
IN LINE WITH OUR Q1 2020 EARNINGS REPORT:

Logic/Foundry
• Healthy spending environment driven by 10nm Logic and sub-10nm Foundry
• Continued development engagements with customers on next nodes, 7nm in logic and 3nm in Foundry

Memory
• Equipment spending remained modest despite further improvement in Memory end markets
• Magnitude of recovery and timing of recovery in Memory equipment demand is still uncertain
IN LINE WITH OUR Q1 2020 EARNINGS REPORT:

Analog
• In this smaller segment, equipment demand is impacted by current weakening of end markets such as in Automotive

China
• Spending by domestic customers in China strongly increased in Q1 2020
• Increasing part of spending in China is moving towards the more advanced nodes
IN LINE WITH OUR Q1 2020 EARNINGS REPORT:

Difficult to forecast full-year 2020 WFE given uncertainties

• Market demand held up well so far however COVID-19 related impact on WFE demand in second half 2020 still uncertain
• Government measures to contain COVID-19 cause supply chain and logistical challenges

Long-term outlook remains healthy

• Advanced node capacity required to facilitate structural growth drivers such as datacenters, 5G and artificial intelligence
• Customers committed to develop next advanced nodes
STRATEGIC PRIORITIES

Increase addressable market in ALD
- Maintain leadership in growing Logic/Foundry market
- Broaden reach and increase share of wallet in Memory markets

Drive structurally higher sales in other product lines
- Broaden position and drive share gains in Epi
- Targeted investments in Furnaces and PECVD

Expand R&D engagements
- Focus on continued strengthening of R&D engagements with key customers
CURRENT MARKET TRENDS AND OUTLOOK

WELL POSITIONED FOR LONG TERM GROWTH

- Strong traction new products and applications
- Strengthened position in Chinese market
- New R&D and manufacturing facility in Dongtan, South Korea, reflecting our strategic focus on this region
- Strong increase of manufacturing capacity by expanding our Singapore manufacturing facility to be completed in Q3 2020
Q2 2020 ASM GUIDANCE

For Q2 on a currency comparable level we now expect sales of €300-350 million. We slightly widened the range by reducing the lower end compared to the earlier indicated range of €330-350 million. The widening of the range is fully attributable to risks related to possible disruptions in our supply chain and logistical operations as a result of additional COVID-19 related actions taken by governments so far. Q2 bookings, on a currency comparable level, are expected to be in the range of €280-310 million.
ASM PERFORMANCE IN THE PAST 12 YEARS
ASM INJURY RATE PERFORMANCE

ASM PERFORMANCE IN THE PAST 12 YEARS

Injury rate

The number of injuries per 100 employees

MARKET CAPITALIZATION ASMI (€ MILLION)
ASM PERFORMANCE IN THE PAST 12 YEARS

VALUE STAKE ASMPT AS % OF MARKET CAP ASMI

250 —
200 —
150 —
100 —
50 —
0 —

CUMULATIVE TOTAL RETURN SINCE 2009

- **ASMI**: 2,439%
- **Direct peers**: 893%
- **SOX index**: 927%

Normalized scale: 0% - 3,000%

Direct peers is the average total return of Applied Materials, Lam Research and Tokyo Electron.