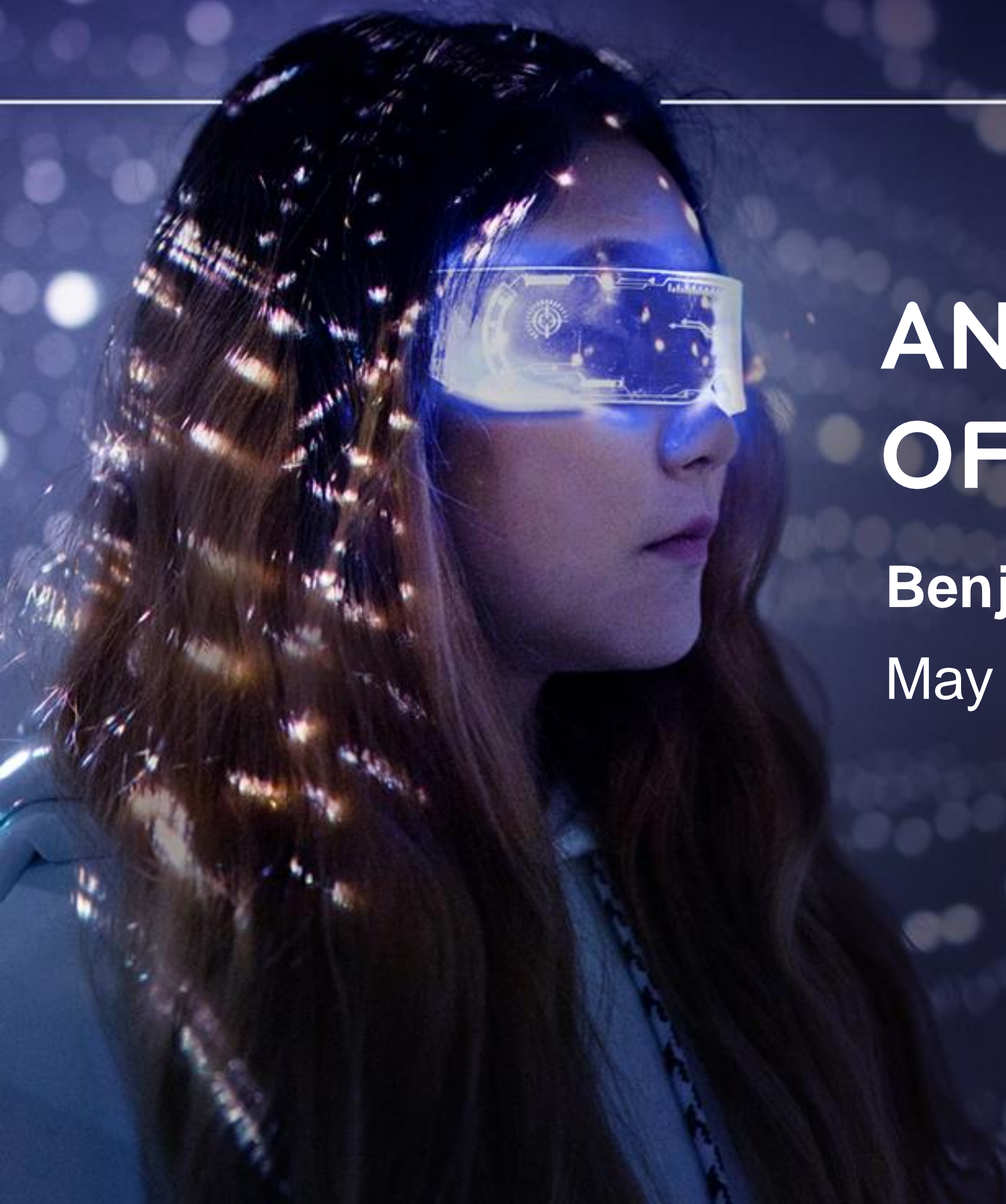


ANNUAL GENERAL MEETING OF SHAREHOLDERS 2021

Benjamin Loh, President & CEO

May 17, 2021



Cautionary Note Regarding Forward-Looking Statements:

All matters discussed in this press release, 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, changes in import/export regulations, 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

BUSINESS AND
RESULTS REVIEW 2020

ENVIRONMENT, SOCIAL AND
GOVERNANCE (ESG)

CURRENT MARKET
TRENDS AND OUTLOOK

COVID-19 RESPONSE
AND IMPACT

FINANCIAL HIGHLIGHTS

OPERATIONAL
EXCELLENCE

LONGER TERM OUTLOOK
AND PRIORITIES



COVID-19 RESPONSE AND IMPACT

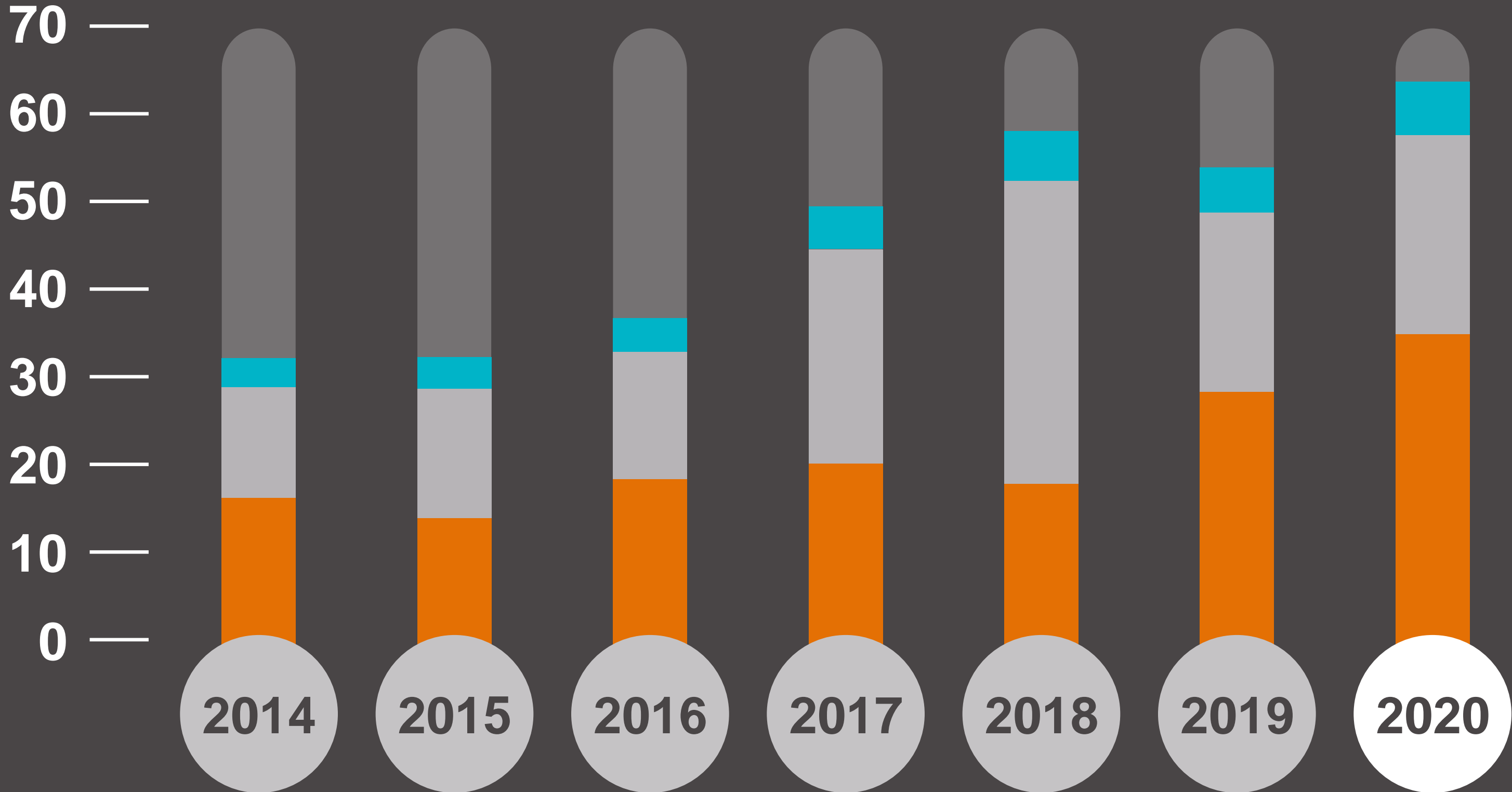


- **Health and safety of our employees, families and business partners is our key priority. All necessary measures were taken, work from home where possible, split-shift work, enhanced cleaning protocols, etc.**
- **While putting the health of all of us first, ASMI employees and business partners showed strong commitment to support our customers in the best possible ways**
- **Parts of the market negatively impacted earlier in 2020, but the overall semiconductor market showed healthy growth in 2020, as the pandemic accelerated digitization trends**
- **COVID-19 created challenges in supply chain and logistics chain in Q2 2020 but we were still able to meet customer requirements in that quarter. In Q3 those conditions largely normalized again**
- **Lockdown measures led to a delay in the construction of the new Singapore facility which was completed in Q4 2020**

**BUSINESS AND
RESULTS REVIEW 2020**



WAFER FAB EQUIPMENT BY INDUSTRY SEGMENT (US\$ BILLION)



- ASMI estimates 2020 WFE increased with a mid to high teens %
- Solid growth in logic/foundry
- Healthy growth in memory

- Other
- Memory
- Logic/foundry

Source: VLSI Research, April 2021



TOTAL REVENUE GREW 18% IN 2020

(excluding settlement proceeds in 2019)

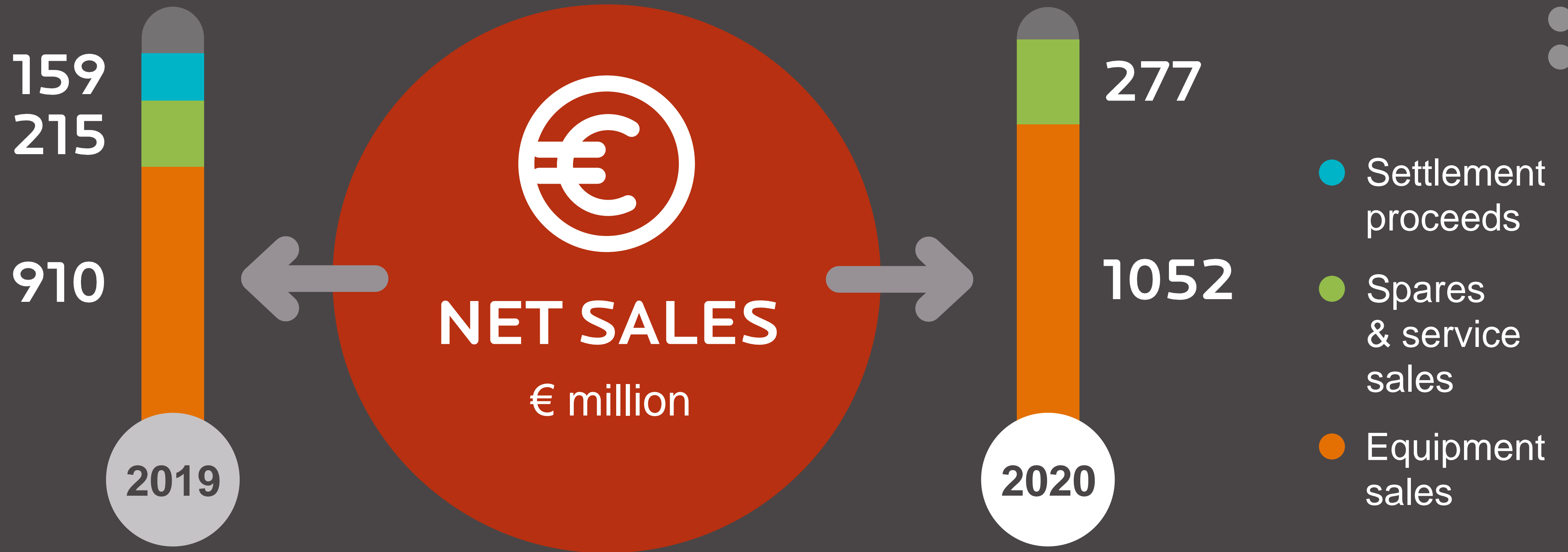
- Revenue growth driven by logic/foundry investments at leading edge nodes where our share of wallet increased substantially
- Sales to the memory sector increased driven by new application wins in DRAM
- Equipment sales were driven by strong double digit growth in the ALD product line, which continued to account for over half of our total equipment revenue
- Spares & service business showed very strong growth of 29%
- Sales to China showed strong growth in 2020, for the first time accounting for a double digit percentage of total sales
- Operating profit increased approximately 50%

NEW MANUFACTURING FACILITY IN SINGAPORE

- Construction completed Q4 2020
- Transition of all activities completed Q1 2021
- Substantial expansion of our manufacturing capacity
- Increased flexibility to meet customer demands
- Designed with sustainability in mind



FINANCIAL HIGHLIGHTS

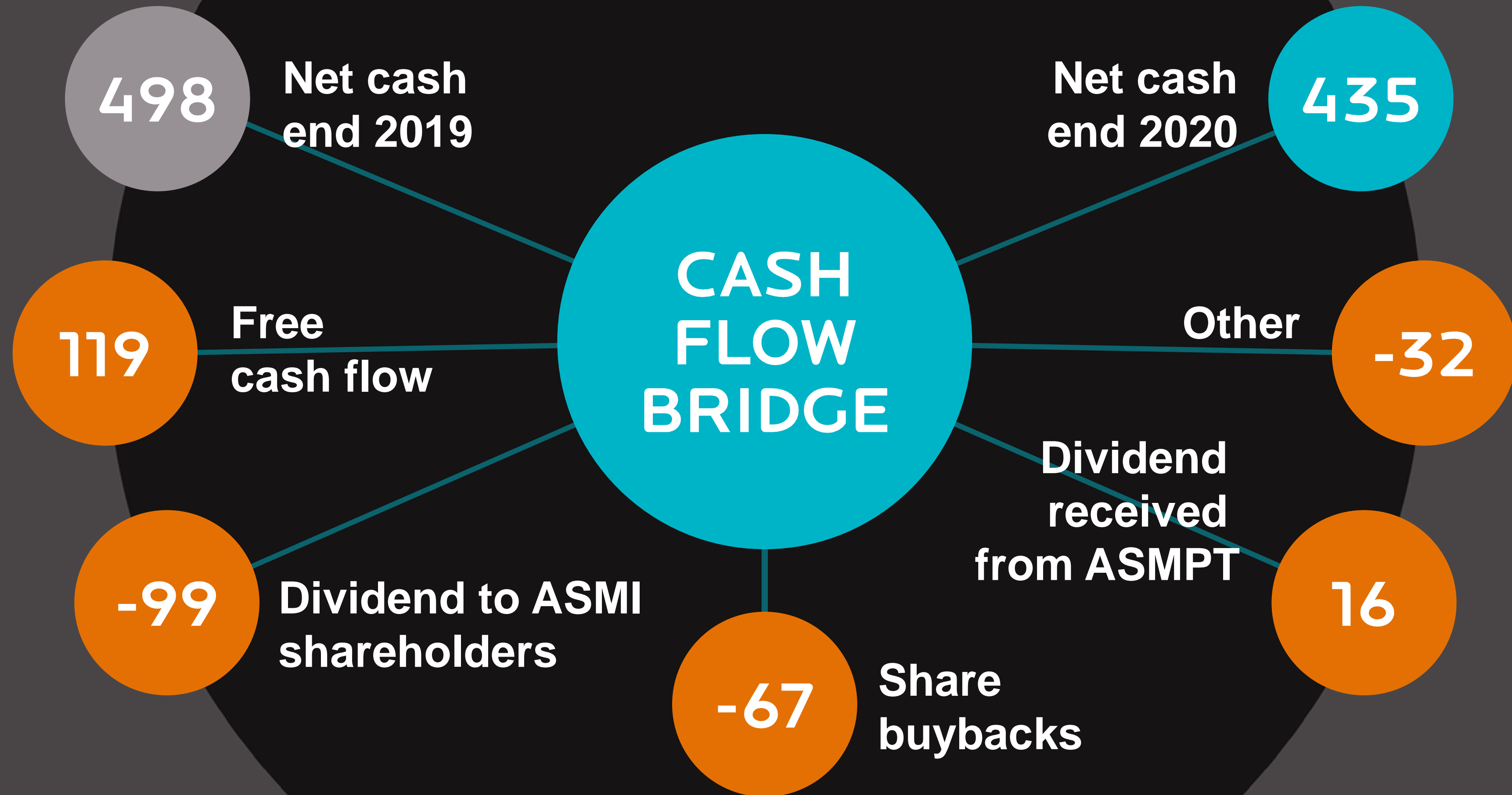




- Settlement proceeds
- Result excl. settlement proceeds

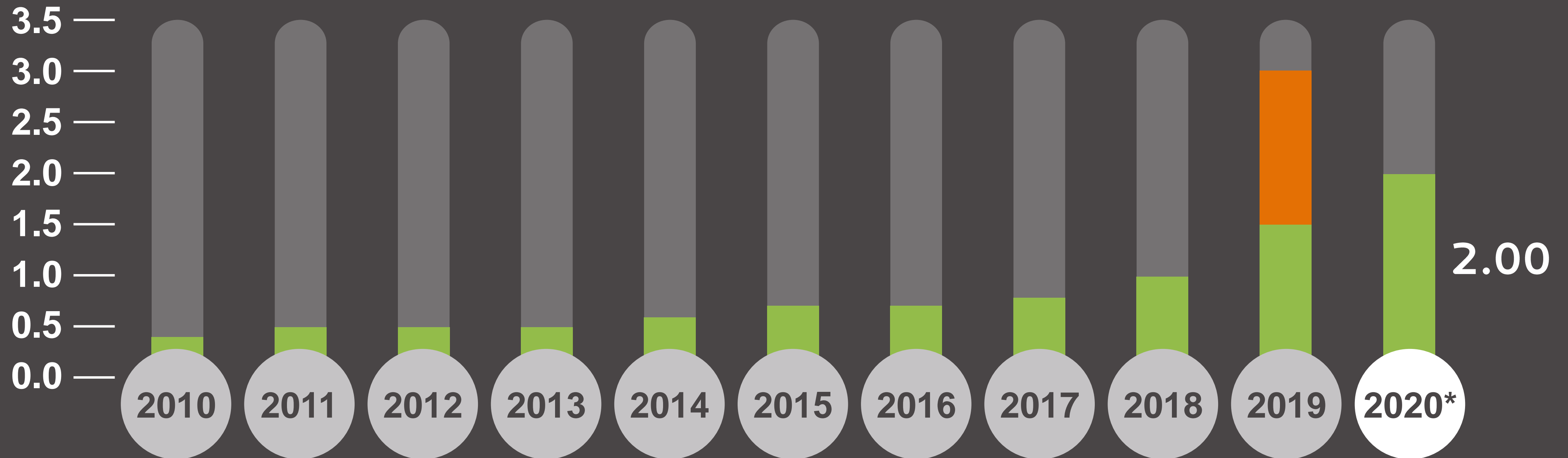


- Result from investments
- Net result excl. ASMPT



SHAREHOLDER REMUNERATION

DIVIDEND PER SHARE IN € PAID OVER



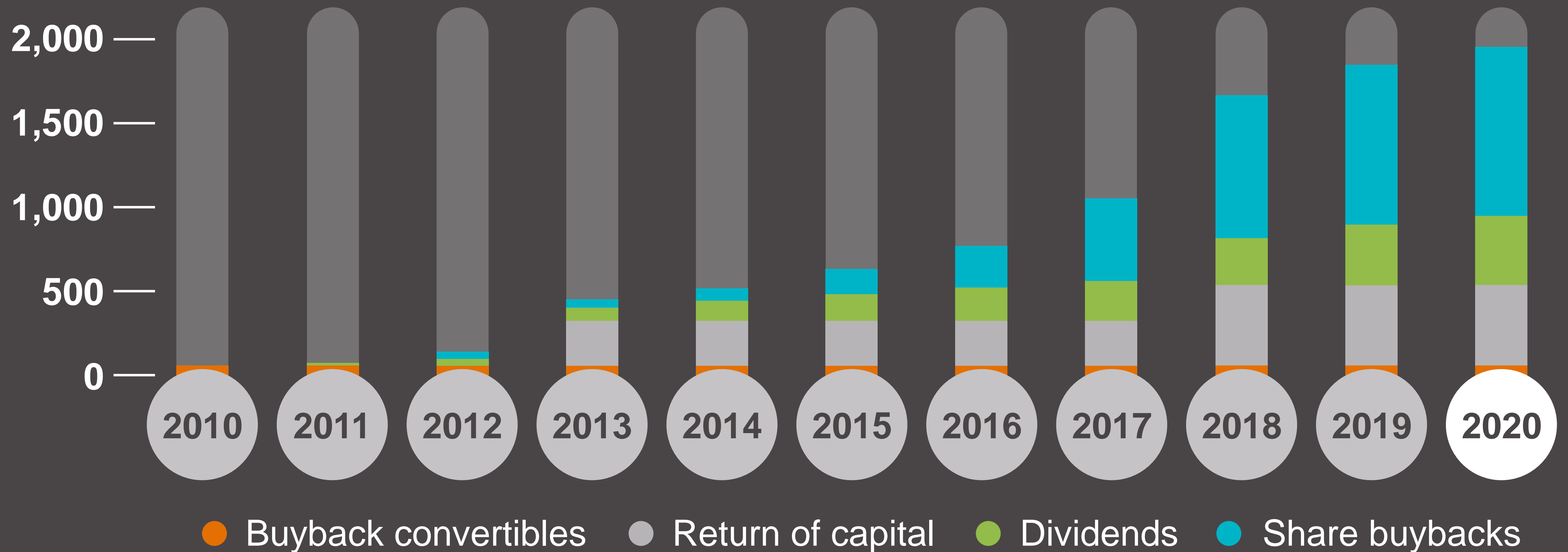
* Proposed

● Regular dividend

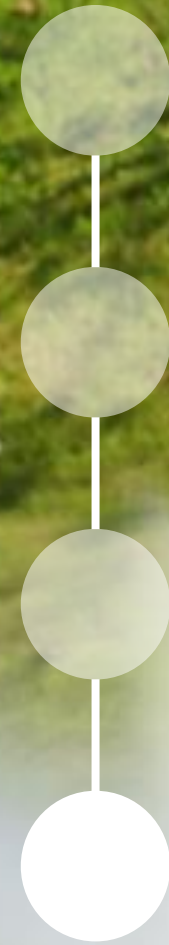
● Extra-ordinary dividend

CUMULATIVE CASH RETURNED TO MARKET

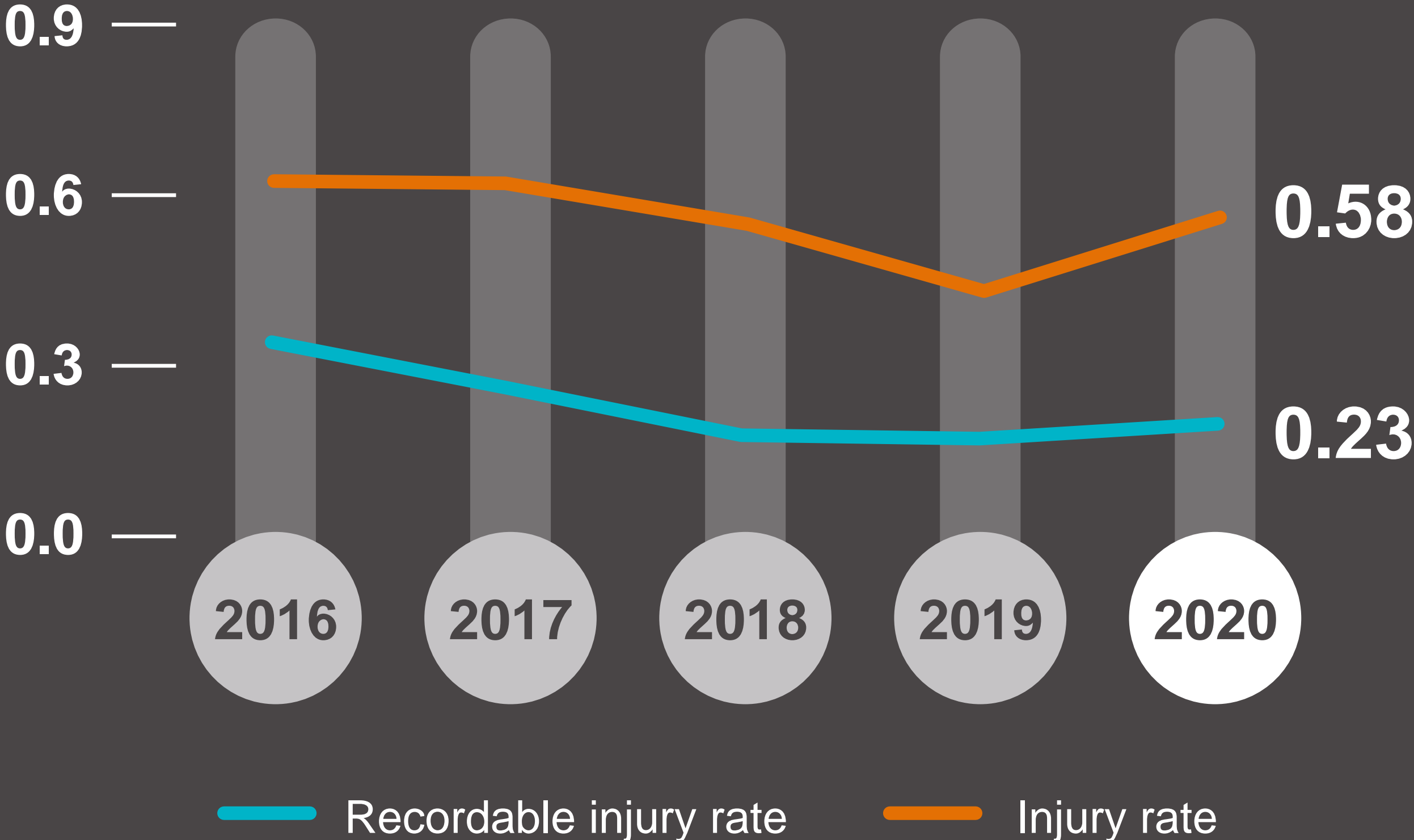
€ MILLION



**ENVIRONMENT, SOCIAL AND
GOVERNANCE (ESG)**



SAFETY: GLOBAL INJURY AND RECORDABLE RATES



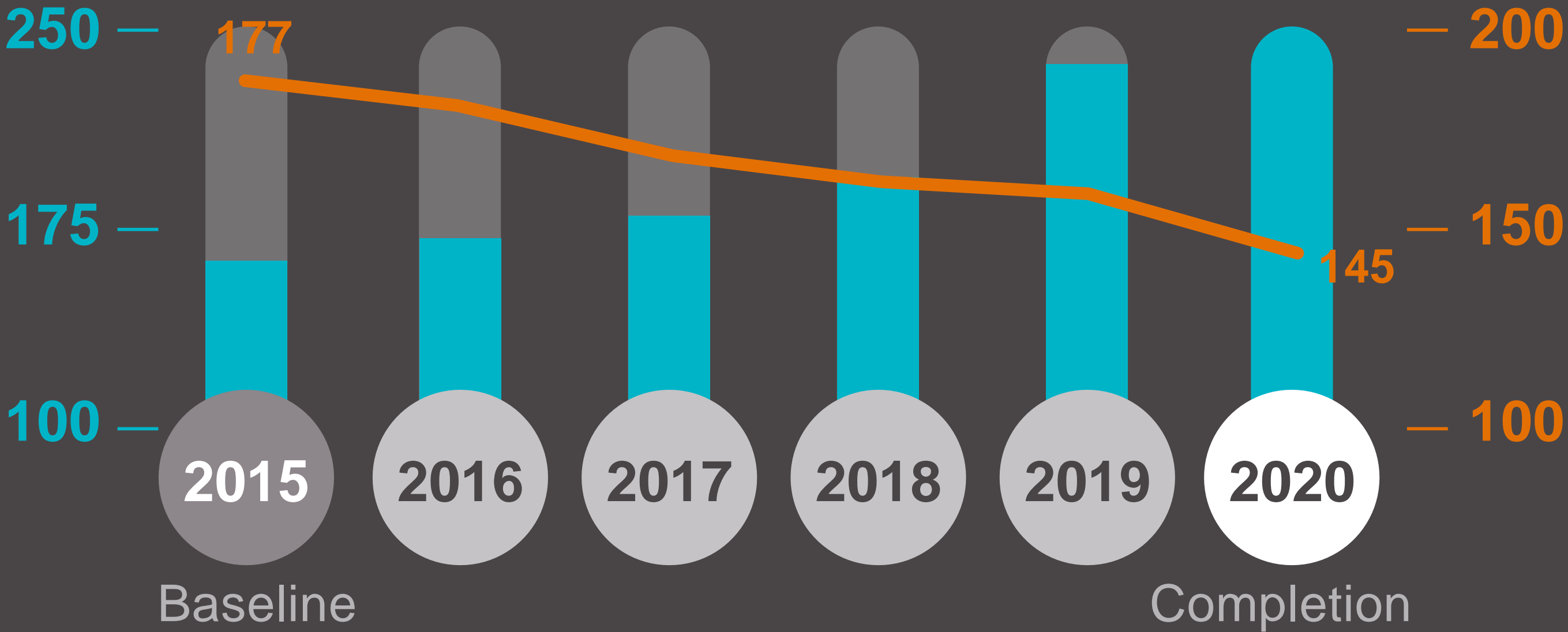
- First increase in 10 years
- Continue striving toward Zero Harm!

* Injuries requiring > first aid, restricted duty, or lost work days, case rate per 100 employees



GREENHOUSE GAS (GHG) EMISSIONS

(Absolute and normalized per R&D investment)



- Absolute Greenhouse Gas emissions (mtCO₂e - Scope 1 + 2, x100)
- Intensity of mtCO₂e/million EUR R&D spend

Objective

Reduce greenhouse gas emissions by 5% per euro of research and development (R&D) investment below 2015 levels

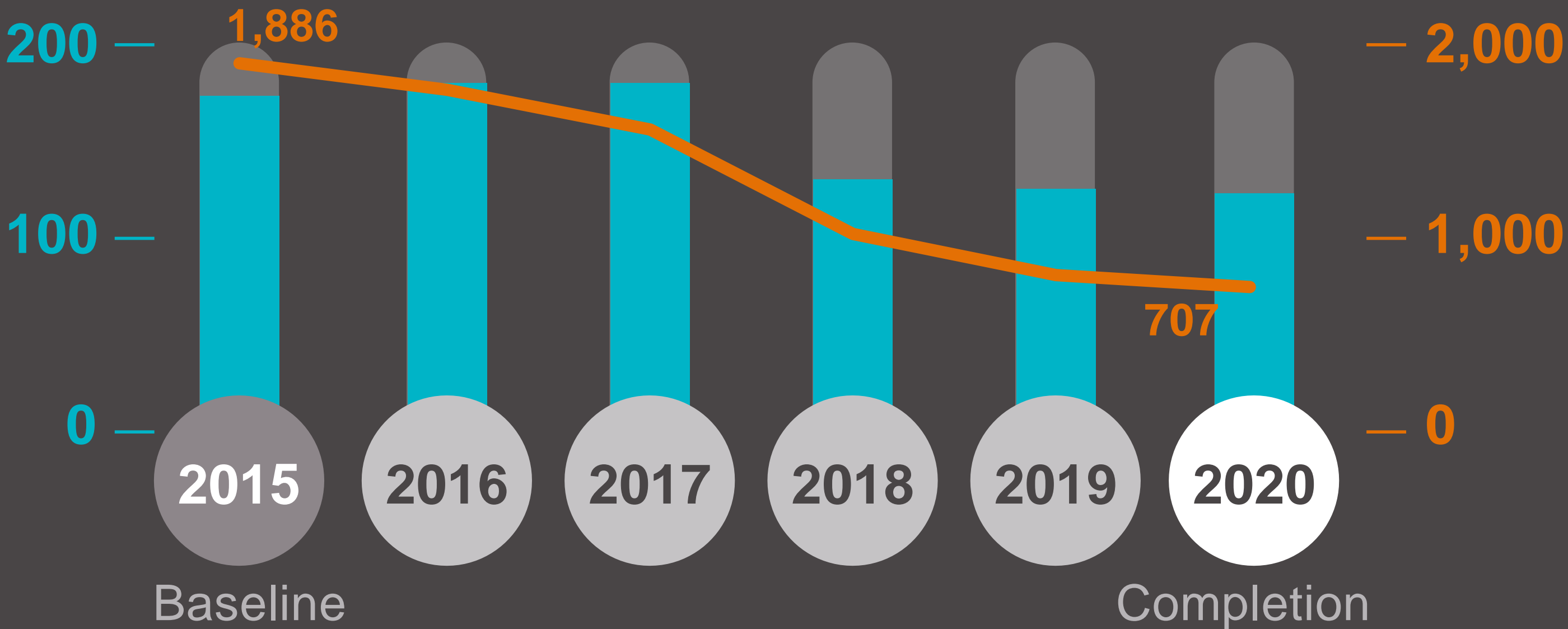
Results

Achieved 17.9% reduction +



WATER CONSUMPTION (M³)

(Absolute and normalized per R&D investment)



- Absolute water consumption (m³, x1,000)
- Intensity m³/million EUR R&D spend

Objective

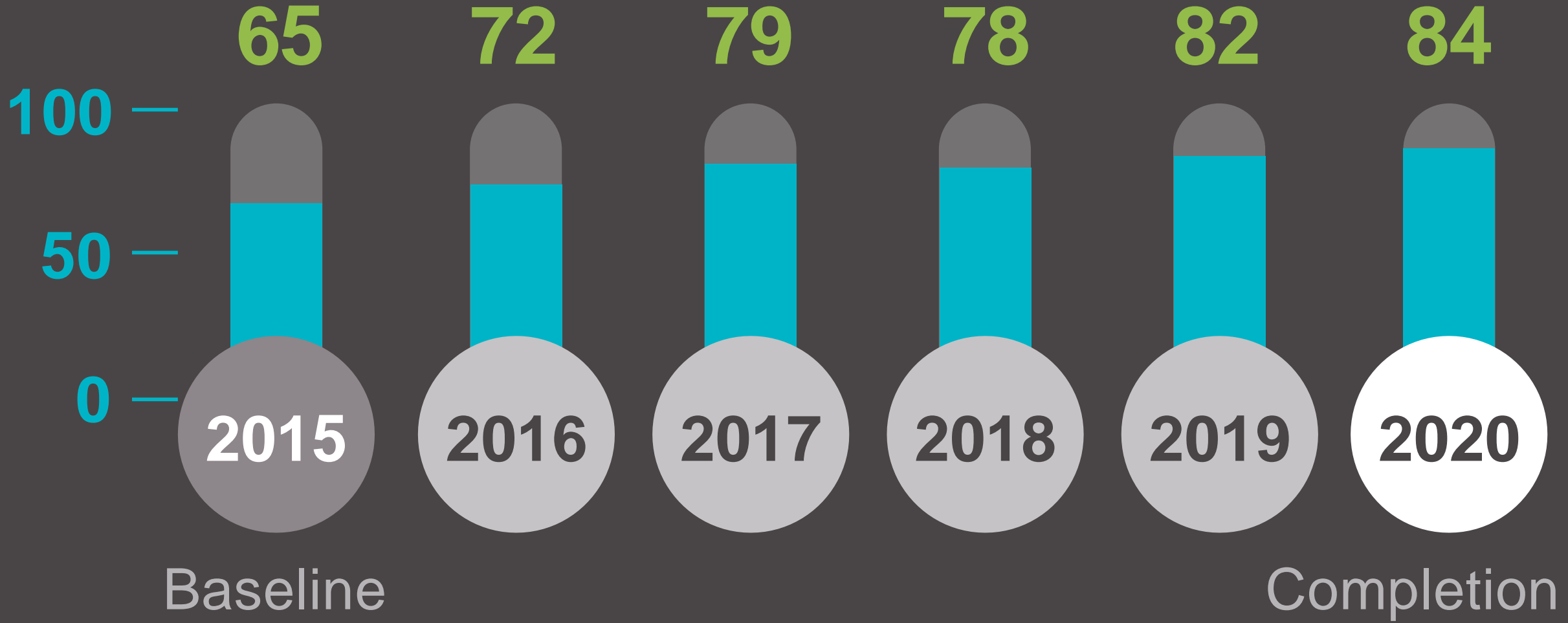
Reduce water withdrawn by 45% (up from initial target of 10%) per euro of R&D investment below 2015 levels

Results

Achieved 62.5% reduction +



LANDFILL DIVERSION RATE (IN %)



Objective	
Divert more than 90% of all waste from landfill through recycle or reuse	
Results	
Fell short of 90% objective —	



ENERGY EFFICIENCY STANDARDS

Objective	Results
All new construction projects to exceed the energy efficiency standards of local jurisdictions	Achieved ✓

2020 ESG HIGHLIGHTS

NEW ASMI SINGAPORE FACILITY – BCA GREEN MARK



RBA MEMBERSHIP



Responsible Business Alliance
Advancing Sustainability Globally



PRODUCT PACKAGING REUSE – 41 METRIC TONS OF WASTE!



KEY CUSTOMER 'RESPONSIBILITY LEADERS' PROGRAM



RECOGNITION AWARDS FOR WATER CONSERVATION





OPERATIONAL
EXCELLENCE

공정개발팀
김홍보

CUSTOMER AWARDS

Intel 2020 Preferred Quality Supplier (PQS) Award with distinguished performance in safety

- The PQS award is in recognition for standout service and for meeting or exceeding annual improvement goals
- To qualify for PQS status, suppliers must score 80% or higher in performance assessments throughout the year, and demonstrate outstanding quality and business systems
- This is ASMI's 4th PQS recognition and the first repeat year win



CUSTOMER AWARDS

Samsung Contribution Award and appreciation plaques

- Received in November 2020 a Contribution Award for recognition of 30 years of dedicated support

Various appreciation plaques during 2020, including:

- Best cooperation in foundry manufacturing technology in February
- Outstanding support to improve productivity in memory in May

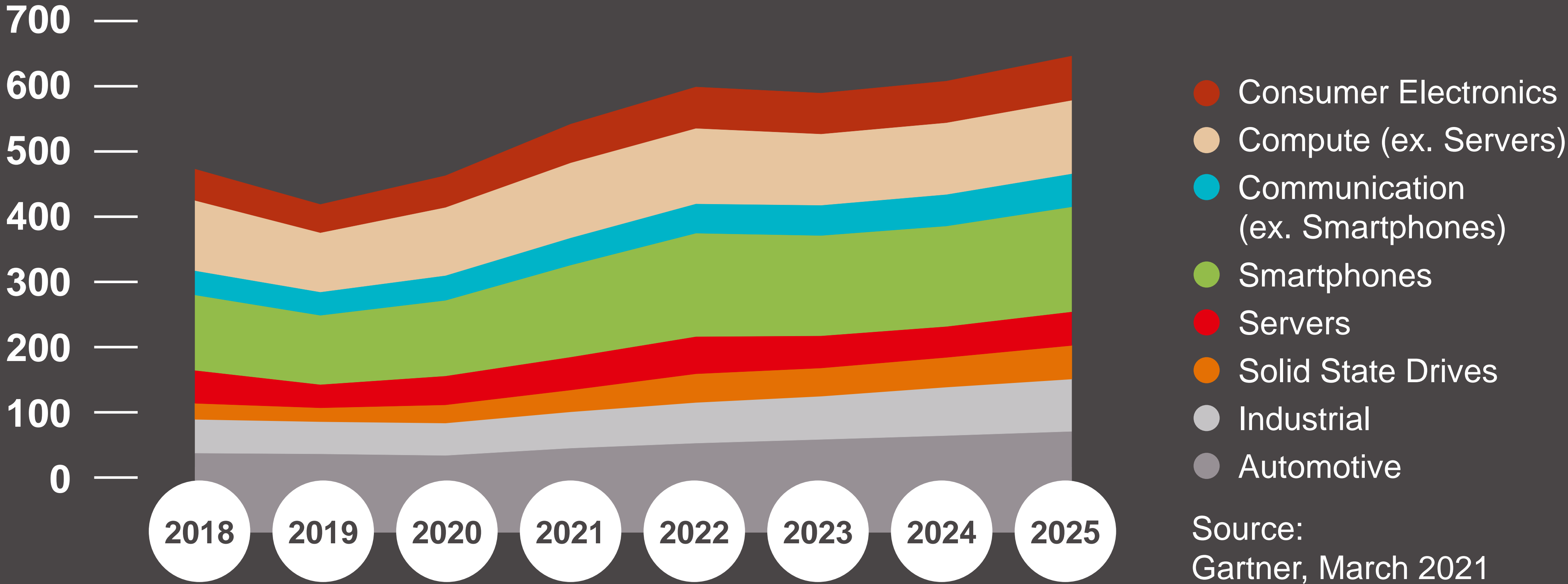


CURRENT MARKET
TRENDS AND OUTLOOK



SEMICONDUCTORS SALES BY KEY APPLICATION (US\$ BILLION)

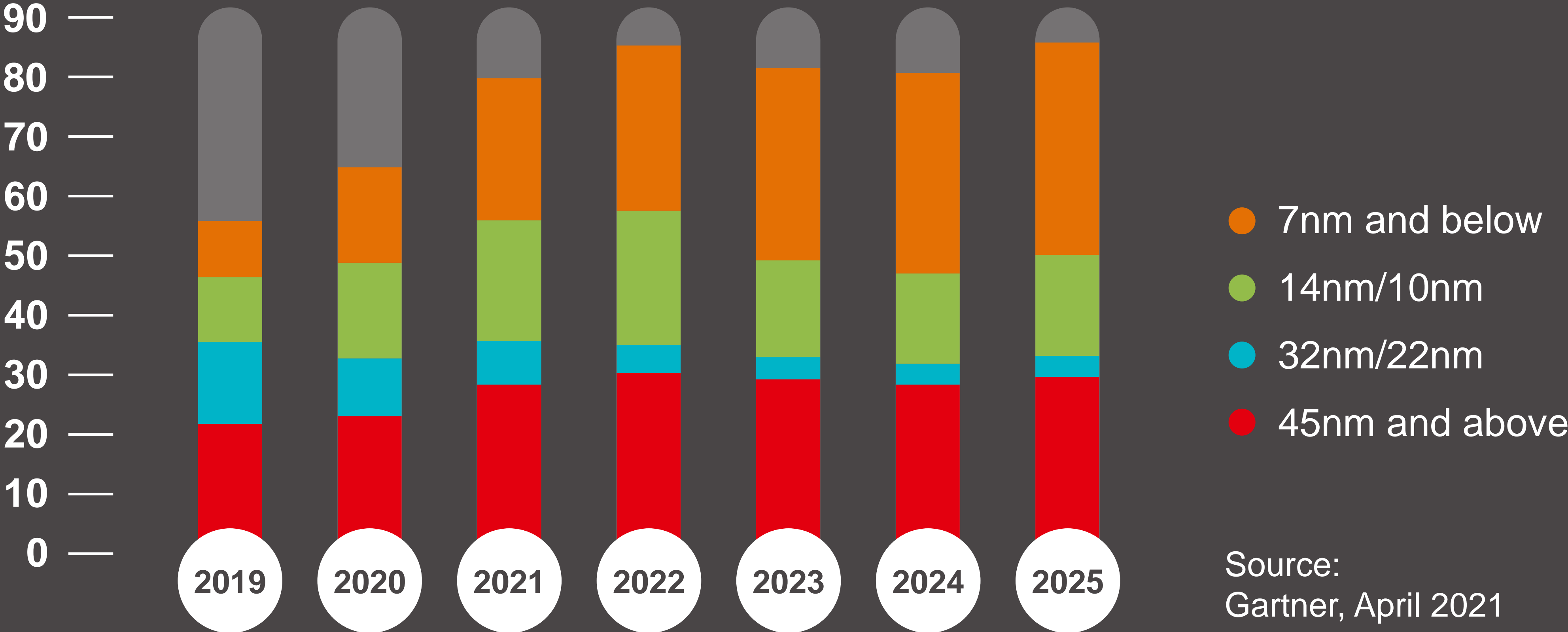
Long term semi growth drivers are smartphones, solid state drives, automotive and industrial



Source:
Gartner, March 2021

WAFER FAB EQUIPMENT BY TECHNOLOGY NODE (US\$ BILLION)

Expected strong growth in 7nm and below plays to ASMI's strength



Source:
Gartner, April 2021

IN LINE WITH OUR Q1 2021 EARNINGS REPORT:

Logic/foundry

- Continued healthy spending environment in 2021, underscored by recent customer capex announcements with focus on leading edge investments

Memory

- Equipment spending expected to further recover in 2021, mainly driven by DRAM

Analog/power

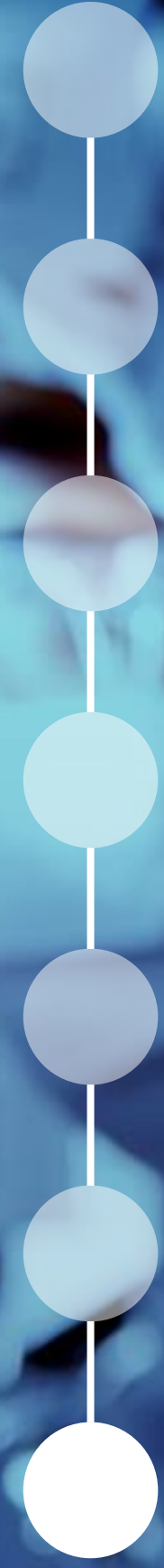
- Equipment demand expected to show a strong recovery in 2021 following the slowdown in the Automotive and Industrials end markets in 2020

China

- Despite ongoing uncertainties due to the regulatory environment, ASMI sales continued to develop in a healthy way in Q1 2021, benefiting from a broader customer base

ASMI GUIDANCE PROVIDED WITH Q1 2021 RESULTS

- **For Q2, on a currency comparable level**
 - Revenue to be €390 - €410 million
 - Bookings to be €420 - €440 million
- **Based upon the current market developments, the wafer fab equipment (WFE) market is expected to grow by a high teens to low twenties percentage in 2021**
- **Based upon our current view, we expect our sales in the second half to be at least at the same level as in the first half**
- **2021 is expected to develop in another year of solid growth for ASMI**



**LONGER TERM OUTLOOK
AND PRIORITIES**

LONGER TERM OUTLOOK

Longer term outlook remains healthy

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

ALD market offering substantial growth opportunities

- ALD market reached a size of \$1.5bn in 2020
- Expected to grow substantially beyond this level in coming years
- ALD to become even more a core technology for customers to enable transition to next nodes
- ALD expected to be the fastest growing segment of overall deposition market



STRATEGIC PRIORITIES ASMI

Strategic direction is the right one

- Further step up ASMI's capabilities to prepare for next phase of growth

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 further expand customer base in Epi
- Invest in targeted niche opportunities Furnaces and PECVD

Grow our spares & service business

- Expand offering of new outcome-based services



STRATEGIC PRIORITIES ASMI

Expand R&D engagements

- Focus on continued strengthening of R&D engagements with key customers
- Further drive R&D spending
- Invest in expansion and upgrading of lab facilities

Well positioned for long term growth

- Strong traction new products and applications
- Expanding memory position with the next and next-next nodes
- Growing our customer base in Epi
- Expanded capacity of our new state-of-the-art Singapore manufacturing facility offers further room for growth

THANK YOU