

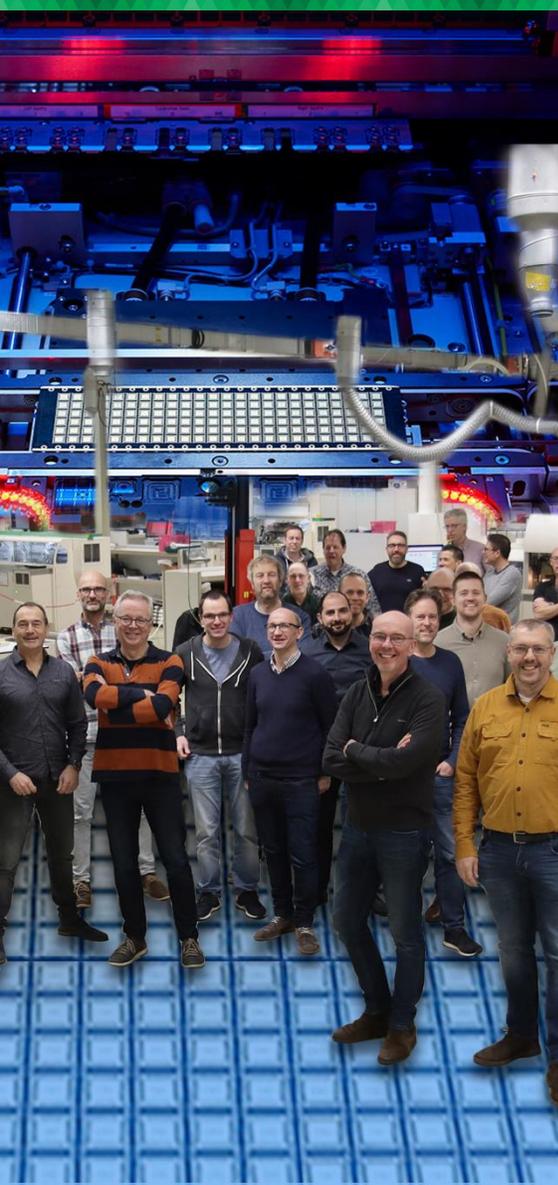


ANNUAL GENERAL MEETING OF SHAREHOLDERS

April 25, 2024

This presentation contains statements about management's future expectations, plans and prospects of our business that constitute forward-looking statements, which are found in various places throughout the presentation, including, but not limited to, statements relating to expectations of orders, net sales, product shipments, expenses, timing of purchases of assembly equipment by customers, gross margins, operating results and capital expenditures. The use of words such as “anticipate”, “estimate”, “expect”, “can”, “intend”, “believes”, “may”, “plan”, “predict”, “project”, “forecast”, “will”, “would”, and similar expressions are intended to identify forward looking statements, although not all forward-looking statements contain these identifying words. The financial guidance set forth under the heading “Outlook” contains such forward-looking statements. While these forward looking statements represent our judgments and expectations concerning the development of our business, a number of risks, uncertainties and other important factors could cause actual developments and results to differ materially from those contained in forward looking statements, including any inability to maintain continued demand for our products; failure of anticipated orders to materialize or postponement or cancellation of orders, generally without charges; the volatility in the demand for semiconductors and our products and services; the extent and duration of the COVID-19 and other global pandemic and the associated adverse impacts on the global economy, financial markets, global supply chains and our operations as well as those of our customers and suppliers; failure to develop new and enhanced products and introduce them at competitive price levels; failure to adequately decrease costs and expenses as revenues decline; loss of significant customers, including through industry consolidation or the emergence of industry alliances; lengthening of the sales cycle; acts of terrorism and violence; disruption or failure of our information technology systems; consolidation activity and industry alliances in the semiconductor industry that may result in further increased customer concentration, inability to forecast demand and inventory levels for our products; the integrity of product pricing and protection of our intellectual property in foreign jurisdictions; risks, such as changes in trade regulations, conflict minerals regulations, currency fluctuations, political instability and war, associated with substantial foreign customers, suppliers and foreign manufacturing operations, particularly to the extent occurring in the Asia Pacific region where we have a substantial portion of our production facilities, potential instability in foreign capital markets; the risk of failure to successfully manage our diverse operations; any inability to attract and retain skilled personnel, including as a result of restrictions on immigration, travel or the availability of visas for skilled technology workers; those additional risk factors set forth in Besi's annual report for the year ended December 31, 2023 and other key factors that could adversely affect our businesses and financial performance contained in our filings and reports, including our statutory consolidated statements. We expressly disclaim any obligation to update or alter our forward-looking statements whether as a result of new information, future events or otherwise.

- I. Company Overview
- II. Market
- III. ESG
- IV. Financial Review
- V. Q1-24 Results & Outlook



I. COMPANY OVERVIEW

Key Highlights

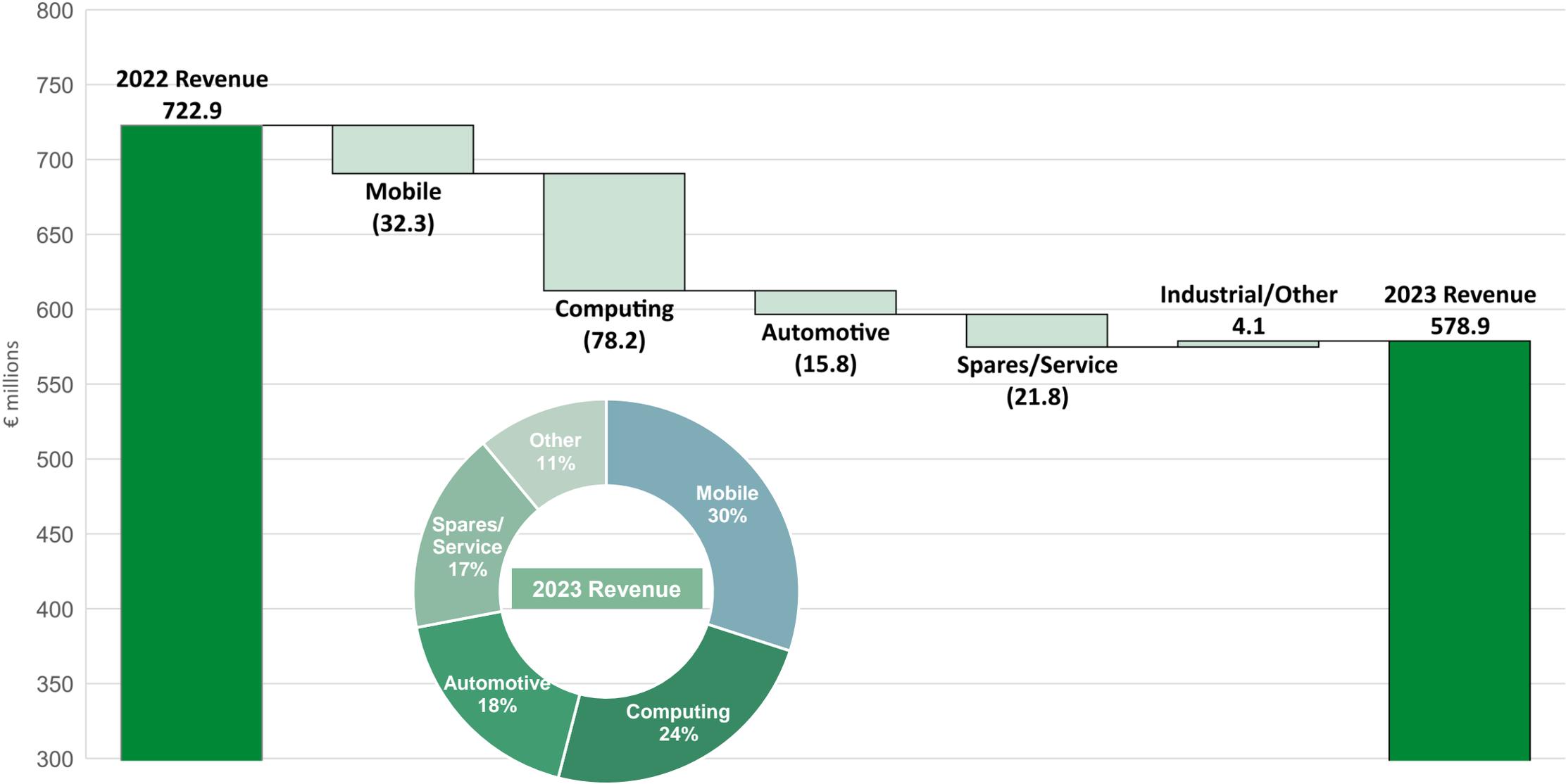
- ✓ Navigated industry downturn at high profitability levels
- ✓ Increased orders for next generation AI, HBM and photonics applications
- ✓ Well positioned for next upturn with leading advanced packaging portfolio
- ✓ Progress continues on hybrid bonding adoption and wafer level assembly agenda
- ✓ ESG initiatives favorably position Besi to meet or exceed 2024 targets
- ✓ Operating footprint increased with expansion in Malaysia, Singapore and Vietnam
- ✓ Capital allocation of € 435.5 million increased 4.6% versus 2022
- ✓ Technology Advisory Board formed

Key Financial Highlights 2023

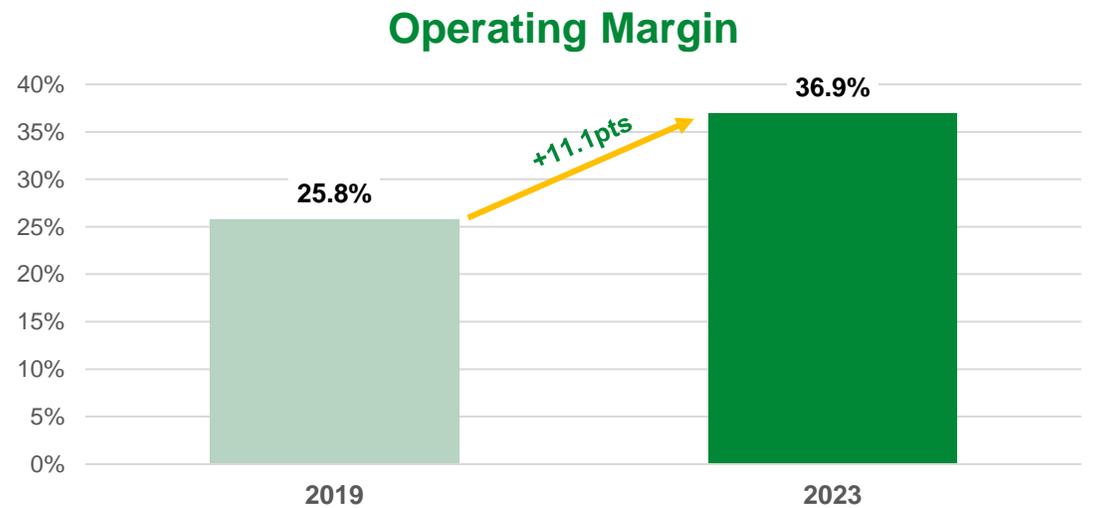
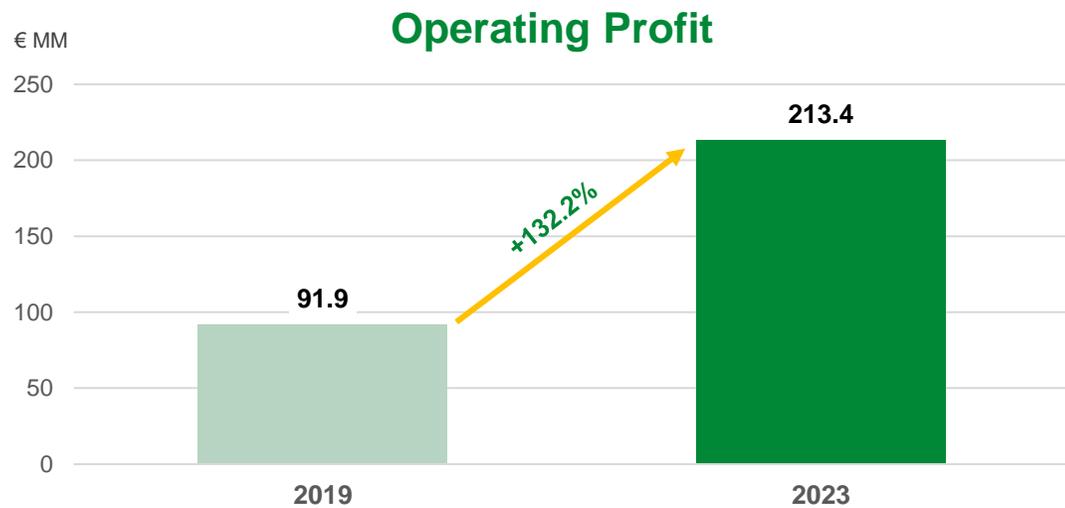
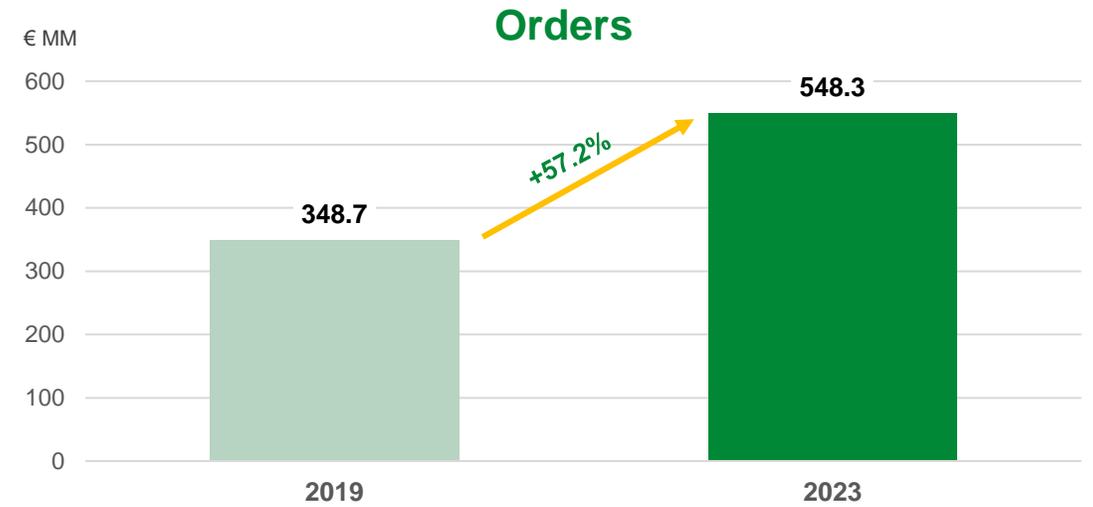
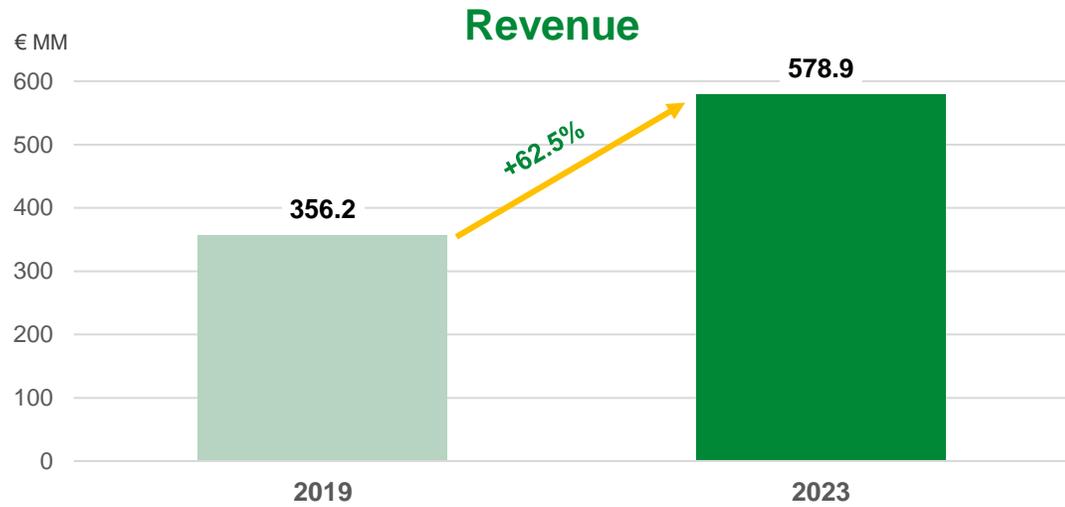


€ millions except % and EPS	2023	2022	2023/22 Variance
Revenue	€ 578.9	€ 722.9	-19.9%
Orders	€ 548.3	€ 663.7	-17.4%
Gross Margin	64.9%	61.3%	+3.6
Net Income	€ 177.1	€ 240.6	-26.4%
Net Margin	30.6%	33.3%	-2.7
EPS (Basic)	€ 2.28	€ 3.03	-24.8%
Return on Average Equity	33.7%	38.6%	-4.9
Net Cash	€ 113.0	€ 346.5	-67.4%

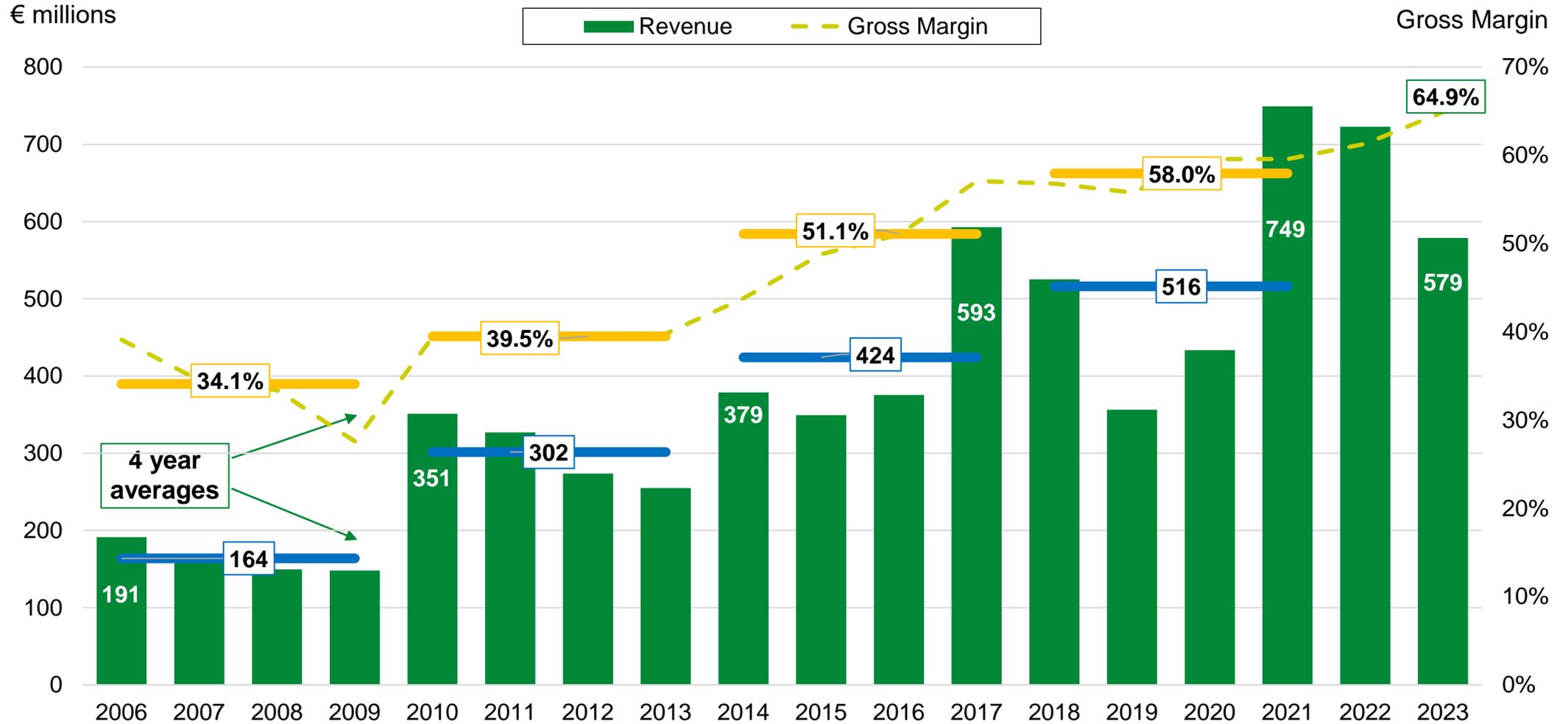
End-User Market Trends 2022/2023



Performance Significantly Above Last Industry Downturn



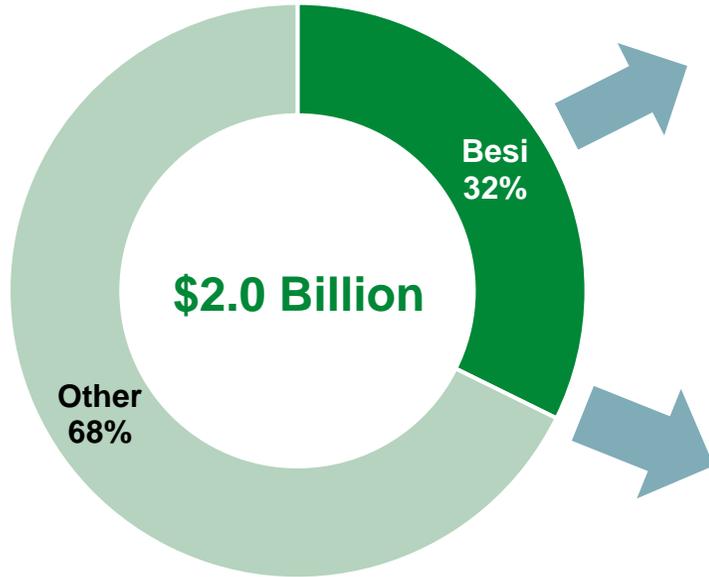
Through Cycle Revenue and Gross Margin Trends



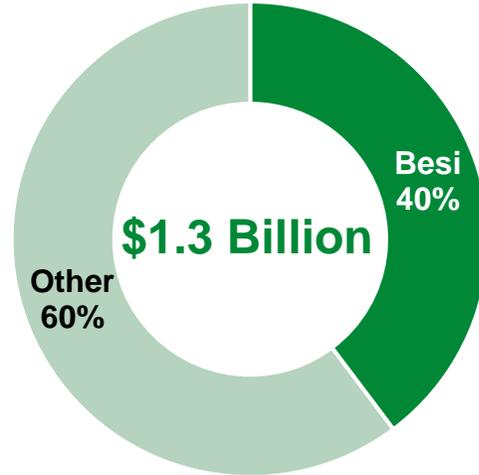
Leader in Addressable Market, Die Attach Market and Advanced Die Placement



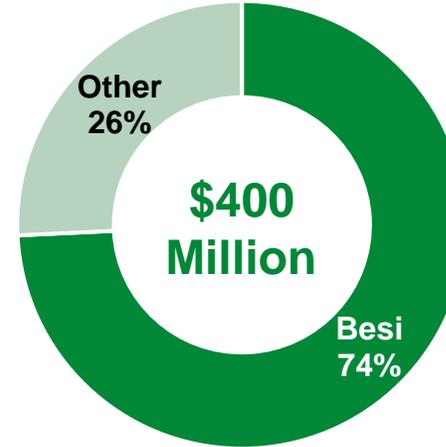
2022 Addressable Market*



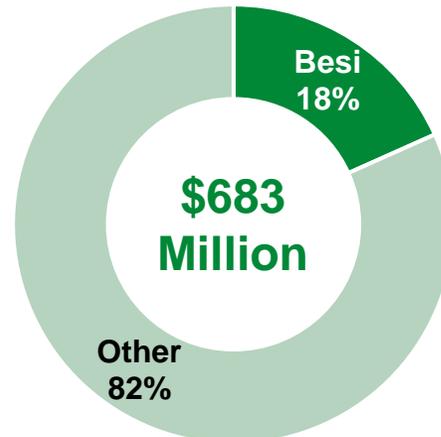
Die Attach (79% of Revenue)



Advanced Die Placement**



Packaging & Plating (21% of Revenue)



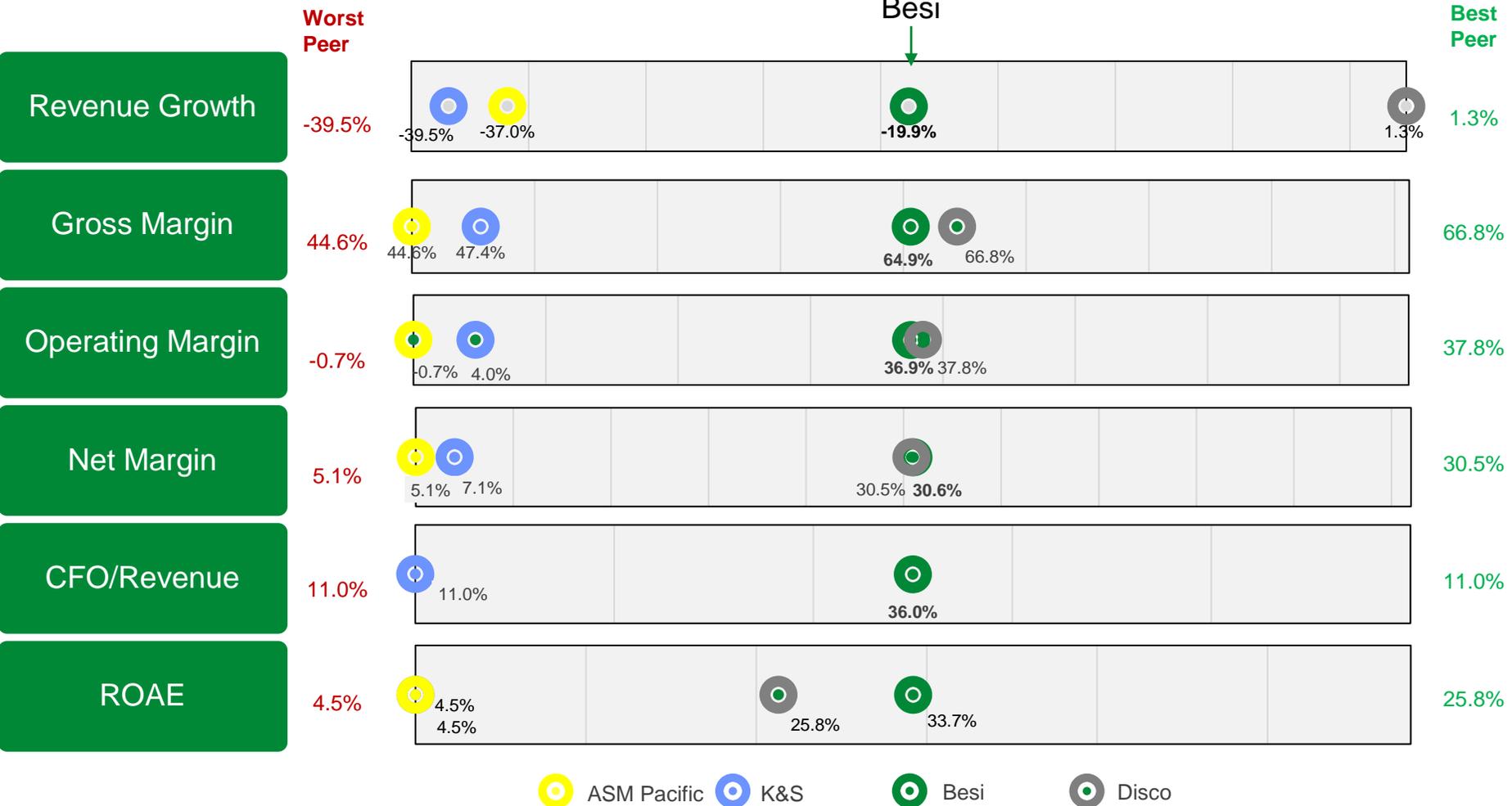
* Excludes wire bonding, dicing, and other
** Advanced die placement defined as < 7 micron accuracy per TechInsights

Source: TechInsights, July 2023. Equipment only.

Peer Leading Financial Metrics



Key Financial Metrics (LTM*)



Besi's margins and ROE have exceeded direct peers through cycles:

- Investment in business model has yielded high returns
- Structurally higher gross and operating margins over past five years
- Besi capital allocation strategy has also helped drive ROE outperformance

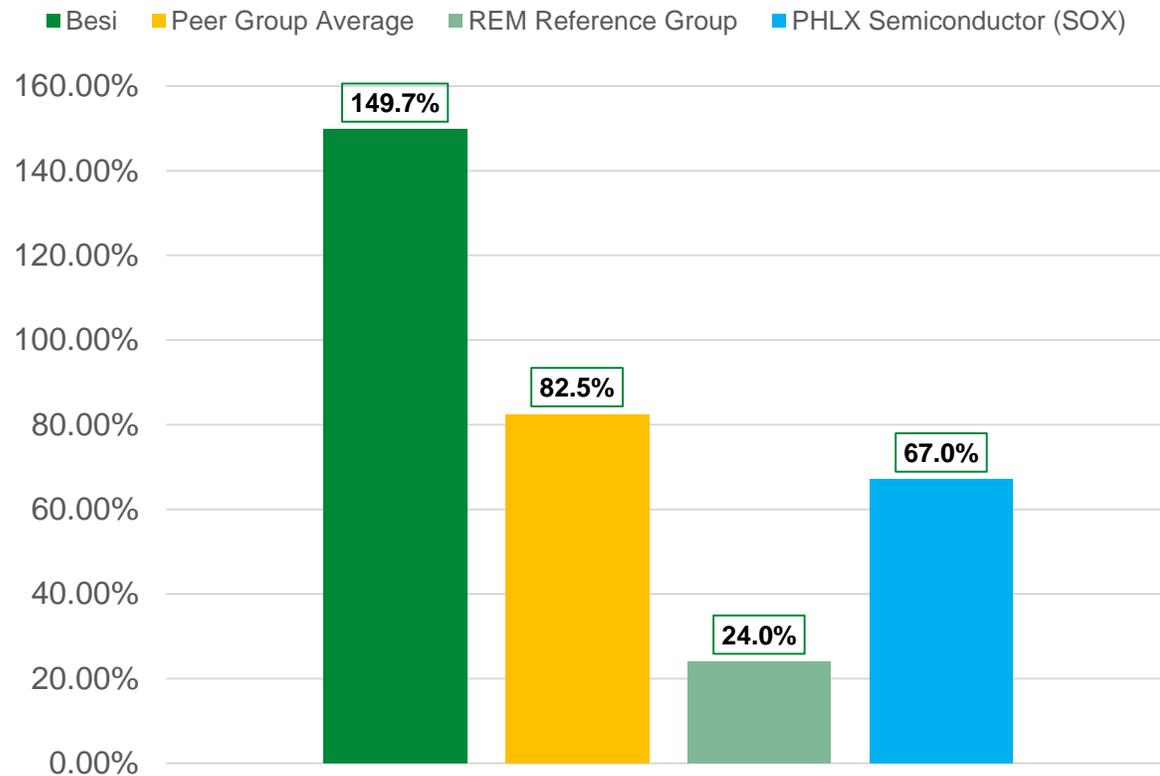
Source: Reuters, ASM PT backend segment information used for revenue, gross margin and operating margins

* LTM ending December 31, 2023

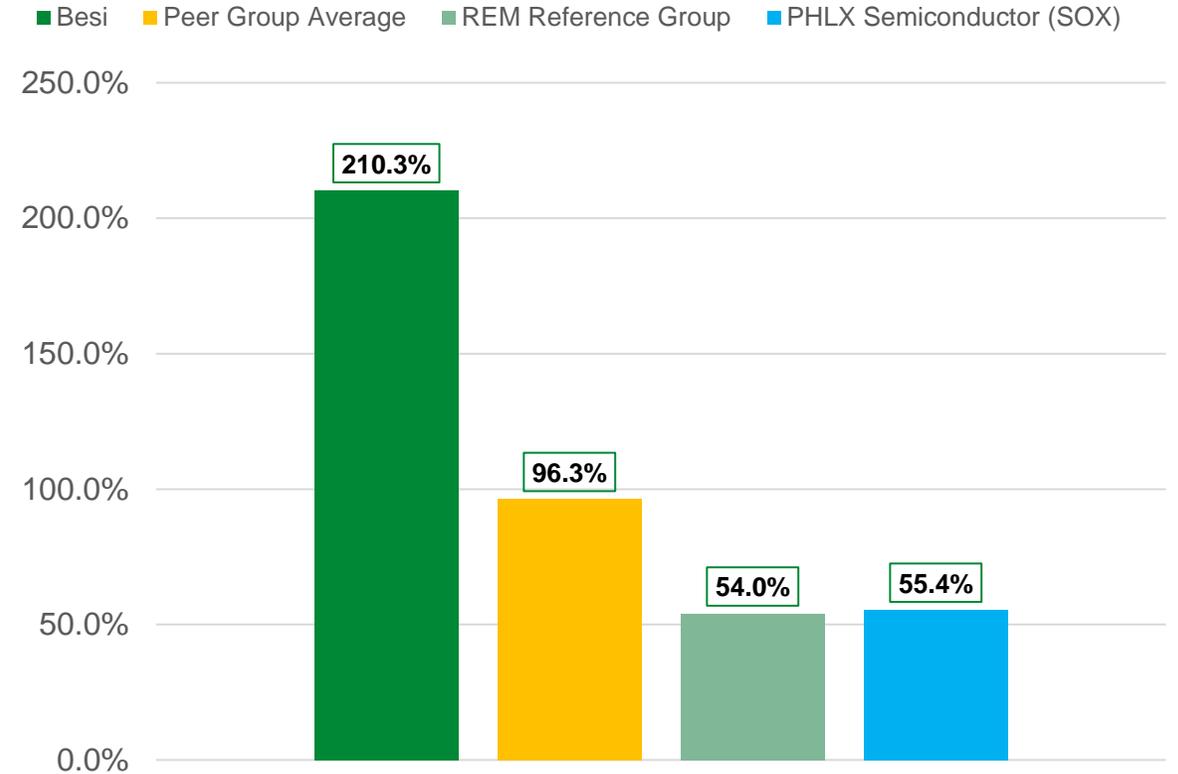
Share Price Outperformance vs. Peers



2023 Total Shareholder Return
Besic vs. Peers, REM Reference Group & SOX Index



3 Year Cumulative Shareholder Return
Besic vs. Peers, REM Reference Group & SOX Index



- Total Shareholder Return includes reinvestment of dividends
- Besic returns calculated in EUR. Philadelphia SOX returns calculated in USD
- Peer group average consists of Kulicke & Soffa, ASM PT, and Disco Corp
- Source: Refinitiv Data Stream

Besi Market Cap and Liquidity Has Expanded Shareholdings Migrated from NL to US/UK over Past 5 Years



Market Profile

Symbol/ Index

- BESI
- Euronext AEX

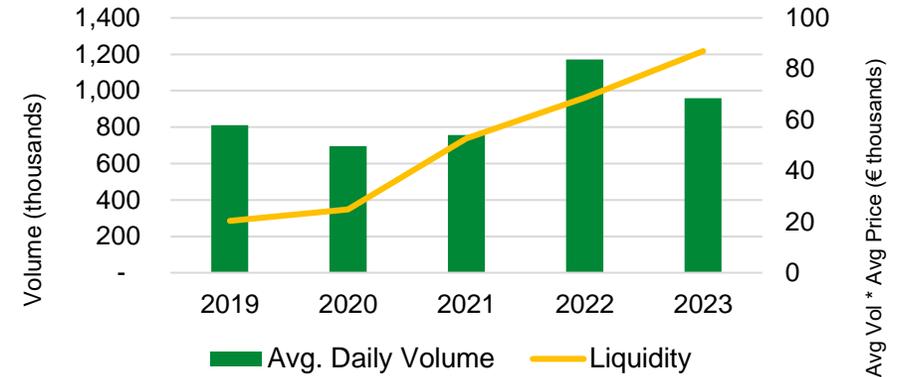
Market Cap*

- € 10.5 billion
(\$ 11.6 billion)

Dividend Policy

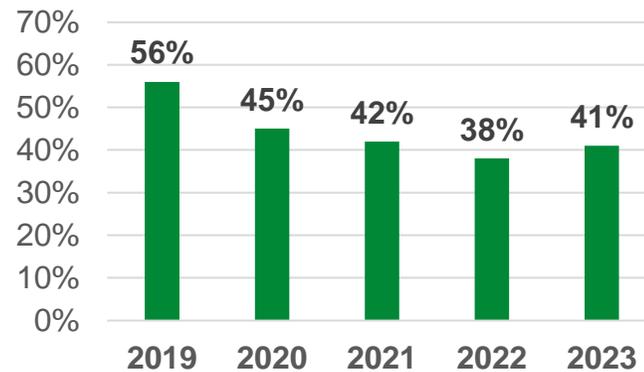
- Pay out 40-100% of
net income per annum

Avg. Daily Volume and Liquidity*

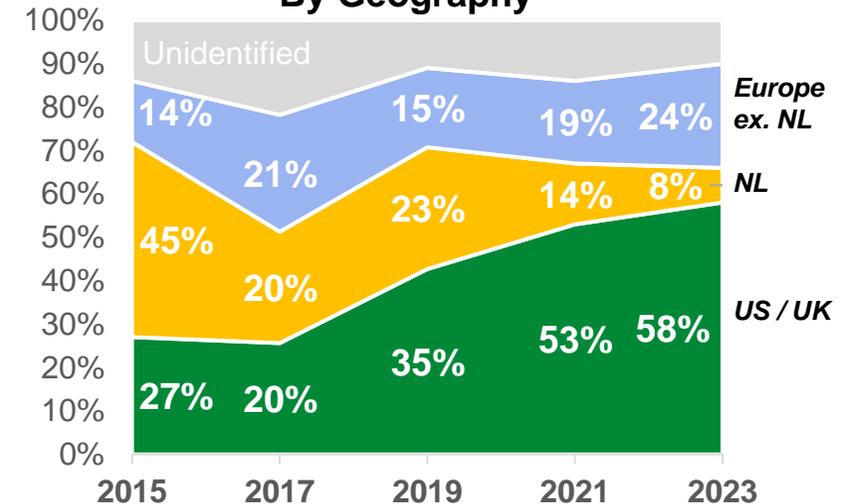


Share Ownership

Top 10 Shareholders** (% of shares outstanding)



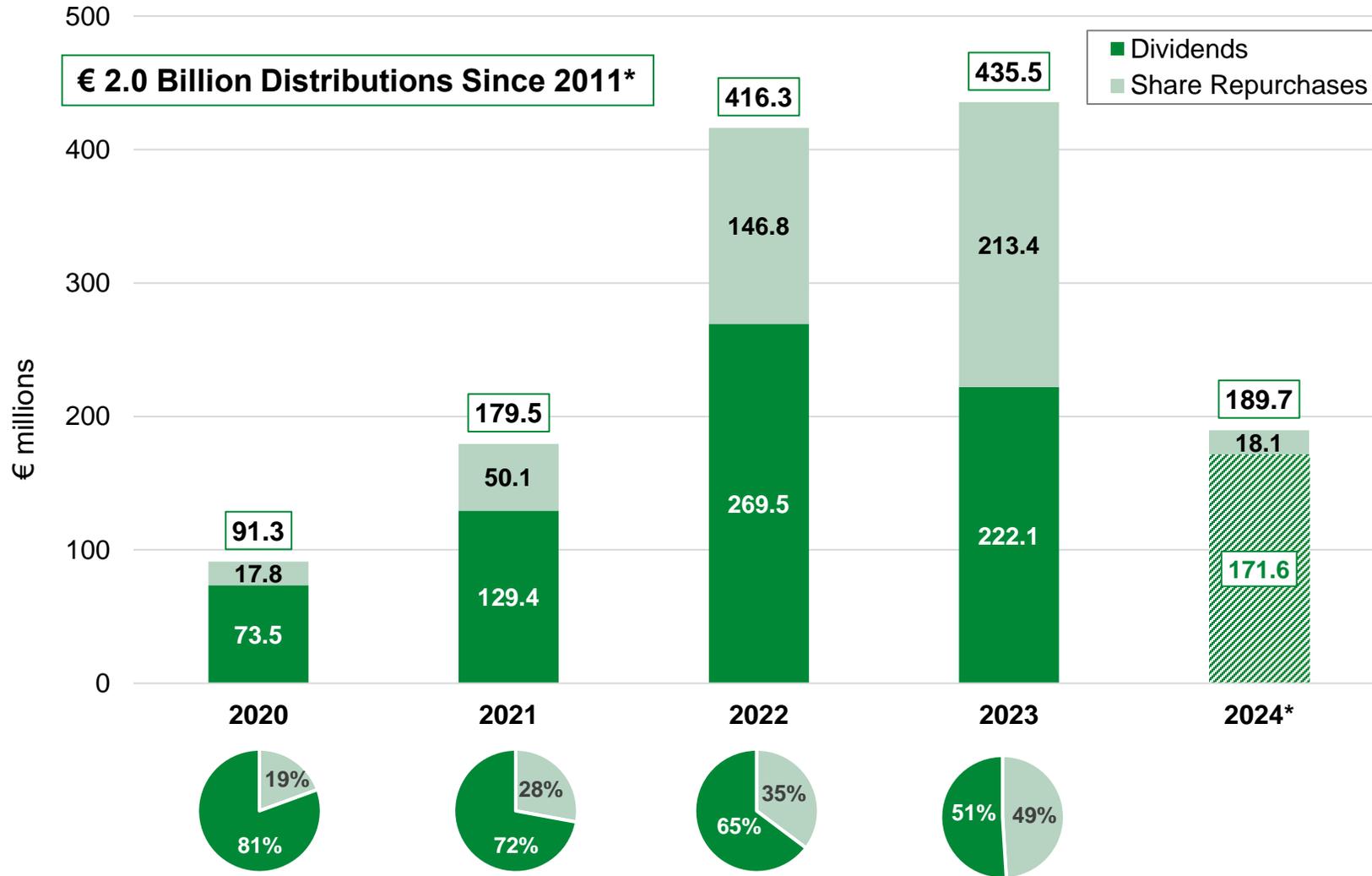
By Geography



Share ownership is based on information per AGM of presented year

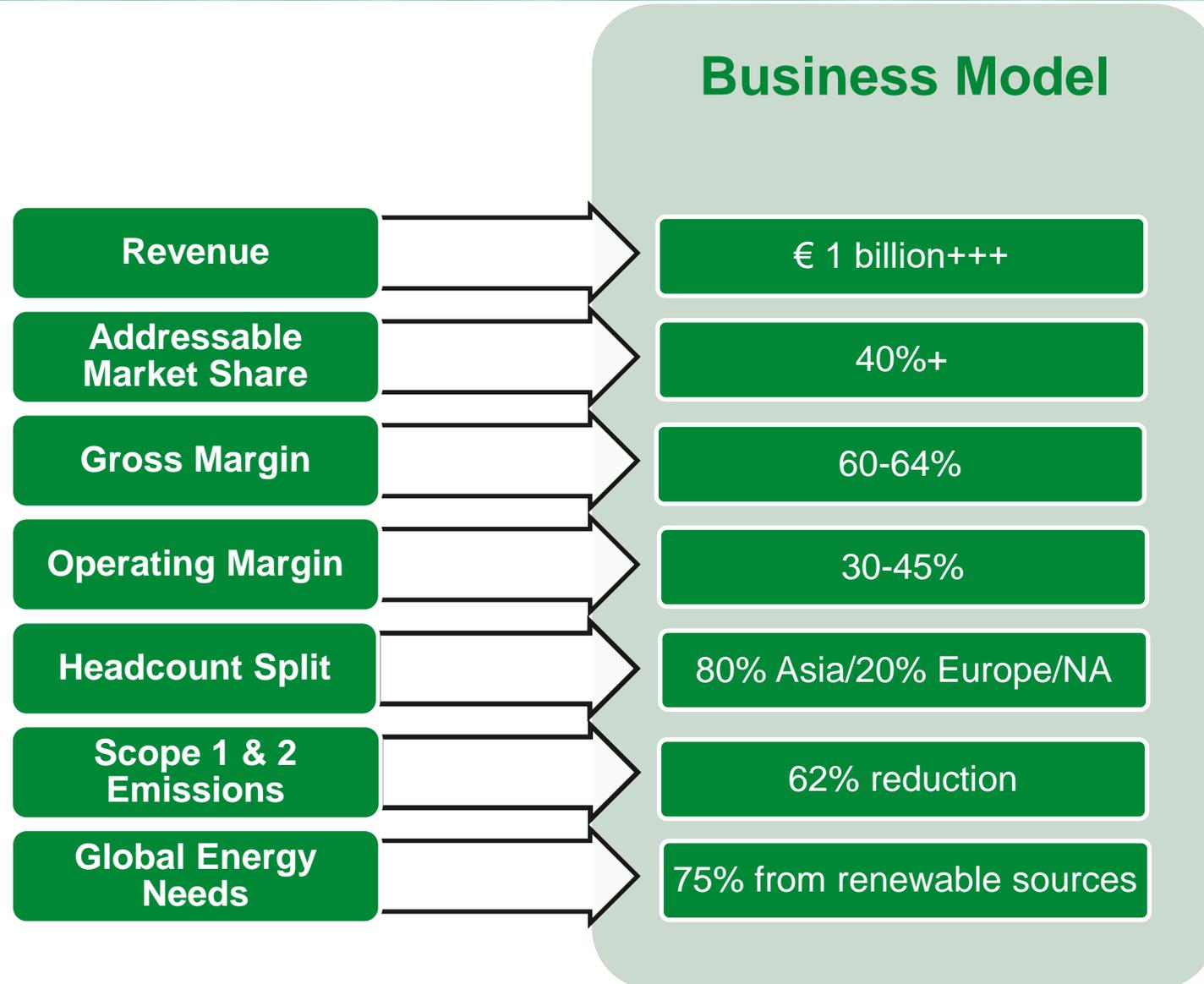
* As of December 31, 2023 ** Besi estimates

Attractive Capital Allocation Policy Continues



- € 435.5 million distributed in 2023
- € 300 million buyback program completed:
 - ~4.3 million shares purchased
 - Average price: € 69.87 per share
- New € 60 million program:
 - € 10 million purchased in 2023 at average price of € 123.93 per share
- Treasury shares equal 2.0% of TSO after April 2024 conversions
- € 2.15 dividend proposed for AGM approval. 97% pay-out ratio

* Includes proposed dividend for approval at 2024 AGM and repurchases up to April 19, 2024.

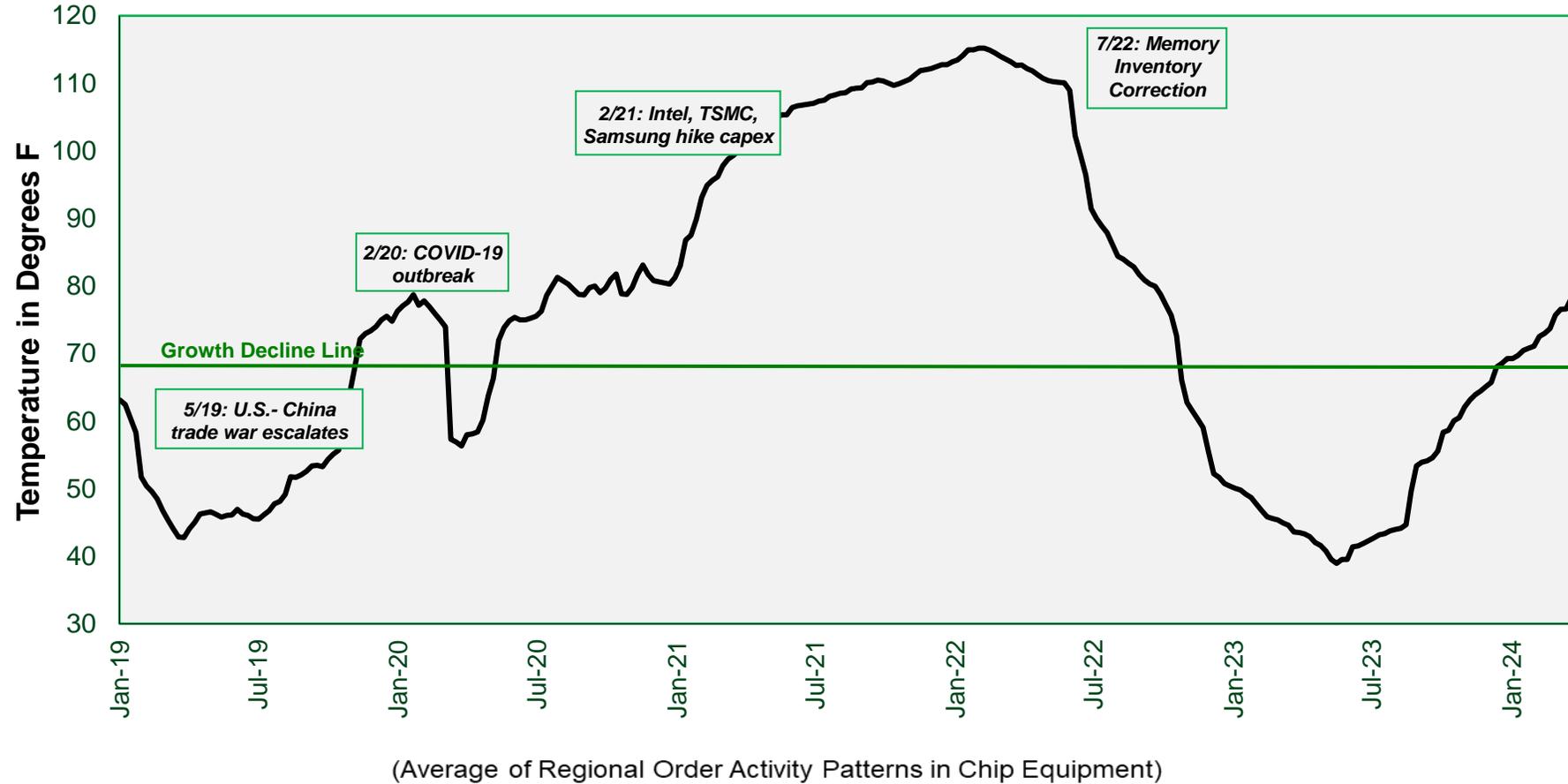




II. MARKET

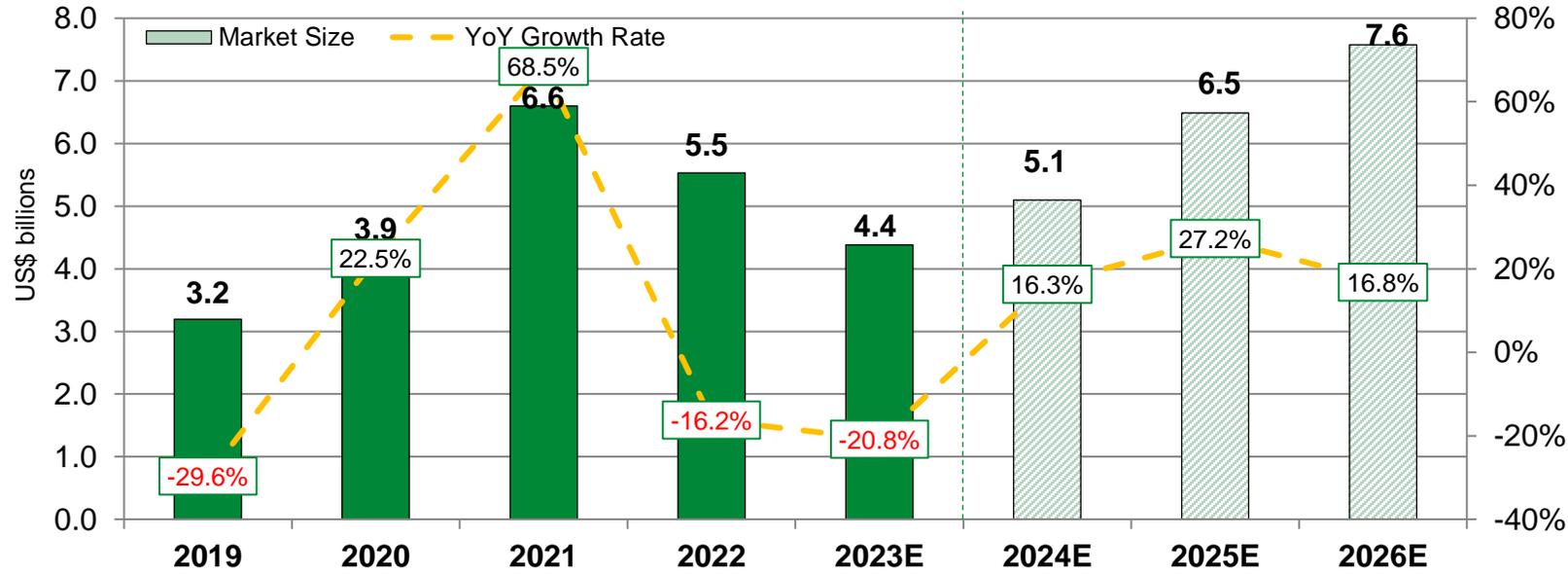
Market Conditions Reached Trough in 2023. Slow Recovery of Assembly Market

TechInsights Global Chip Making Climate Trend Index

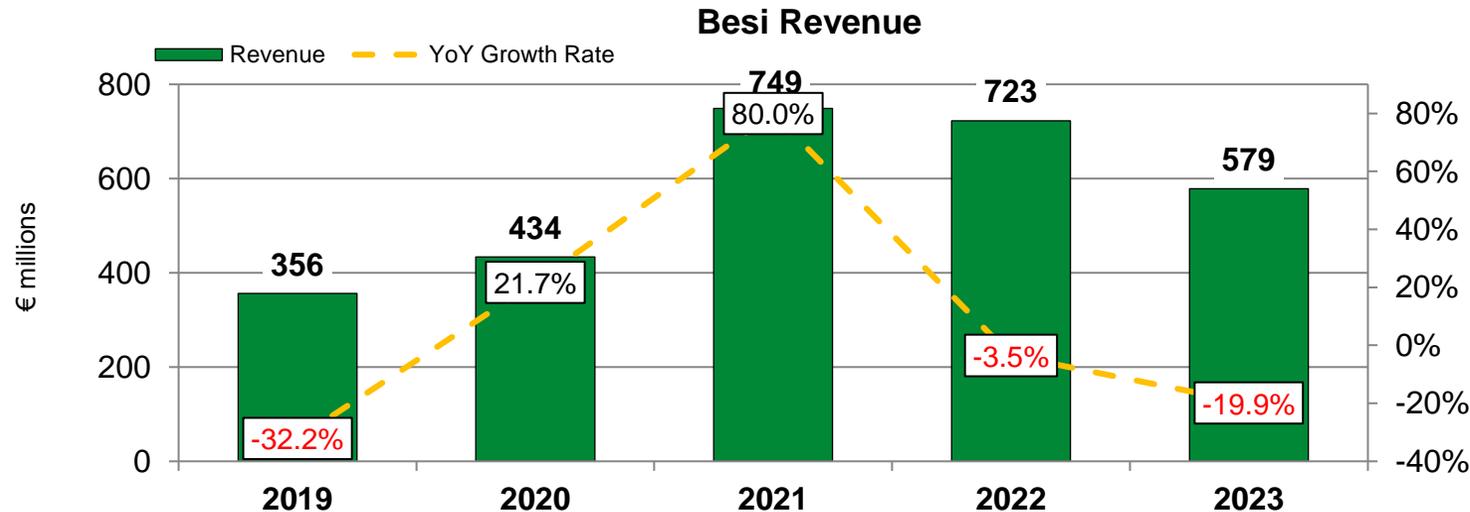


Source: TechInsights, April 2024

Assembly Equipment Market Trends 2019-2026E



Source: TechInsights, March 2024. Assembly equipment revenue excludes hybrid bonding contribution and service revenue.



TechInsights now forecasts 21% downturn in 2023

- Versus -26% last forecast
- ~34% decrease from 2021 peak

Strong rebound anticipated

- 2024 forecast to grow 16.3%.
 - Down from original forecast of 31%
 - Driven by AI
 - Mainstream market slow to recover
- Forecast \$ 7.6 billion in 2026
 - +73% from 2023 levels

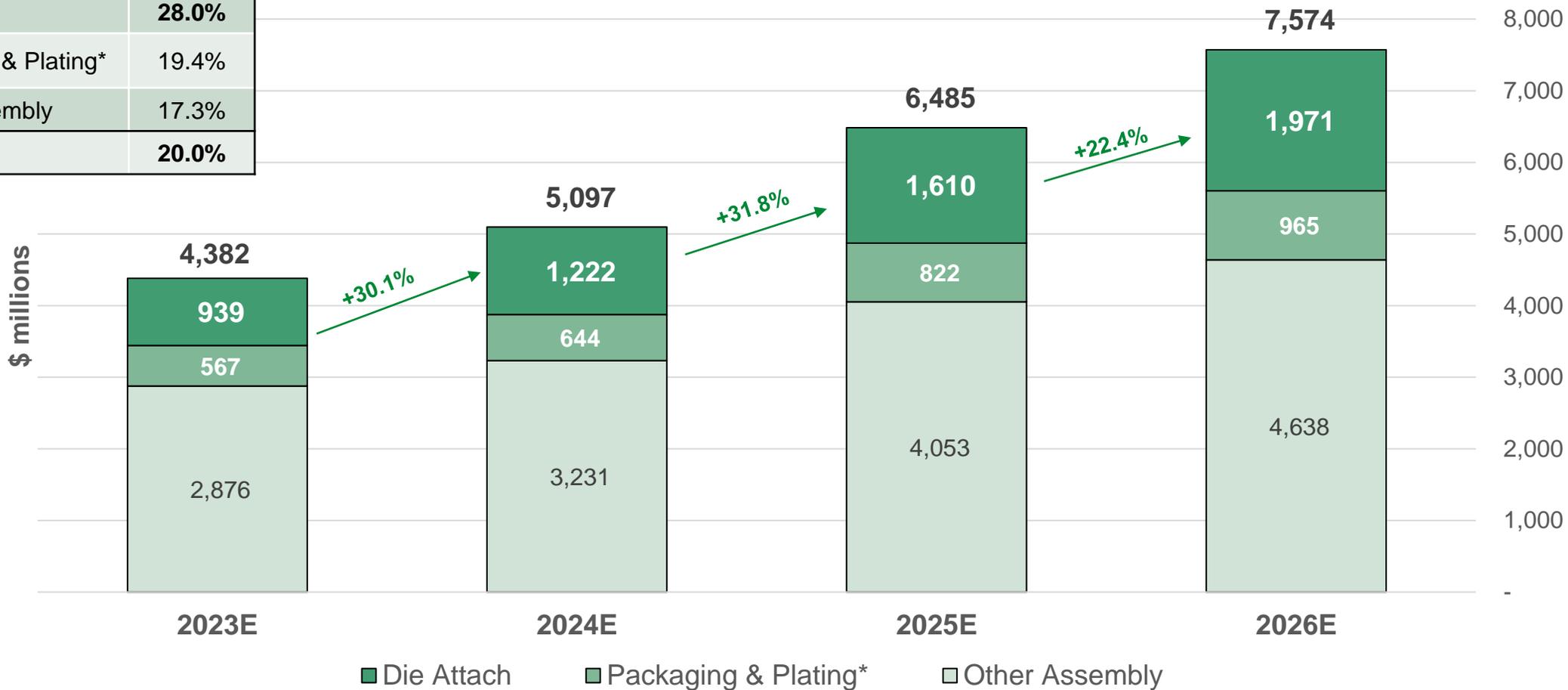
Secular fundamentals intact:

- AI, Datacenter, HPC, 5G, primary drivers
- Investment in new process technologies: hybrid bonding/CSP
- Onshoring new advanced packaging fabs

Growth Expected to Favor Besi's Product Portfolio, Particularly Die Attach



CAGR (2023-2026)	
Die Attach	28.0%
Packaging & Plating*	19.4%
Other Assembly	17.3%
Total	20.0%



Source: TechInsights, March 2024. Addressable market excludes hybrid bonding.
 * Packaging & Plating includes only Besi's addressable segments. Non-addressable reported in other assembly market.

Besi's Advanced Packaging Systems Critical for Next Generation Applications



Mobile

- New generative AI engines
- Edge/AI Enabled Phones
- Advanced Cameras and 3D imaging
- Under display biometric ID
- New AR/VR devices
- 5G advanced devices

Computing

- New generative AI engines
- Supercomputers
- Datacenters
- Edge AI tables, PCs, laptops
- Gaming and infotainment

Auto/Industrial

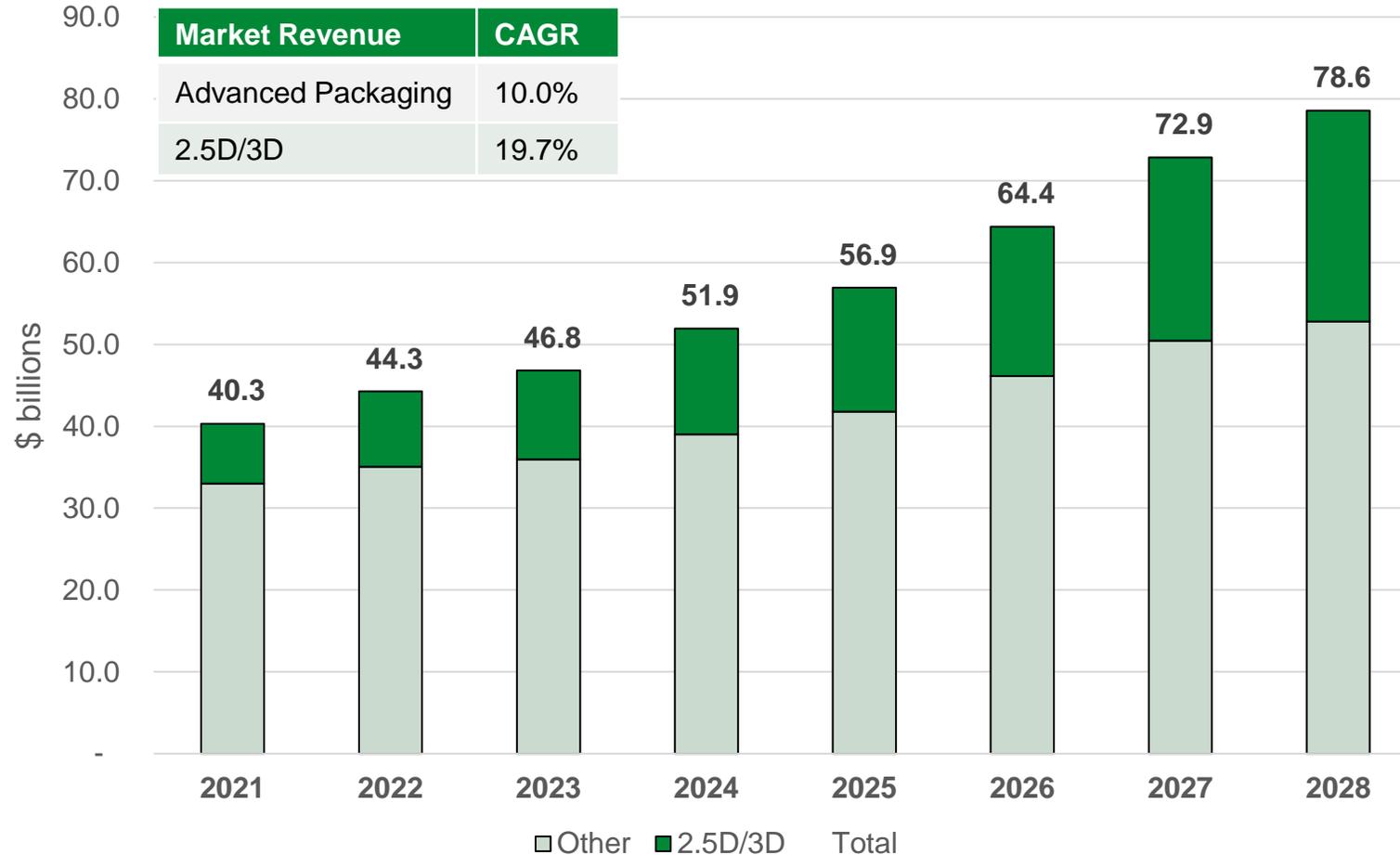
- EV adoption
- Edge AI enhanced features
- SiC and GaN power devices
- Advanced camera modules and sensors
- Autonomous driving
- Factory automation 4.0



Besi Solutions

- **Hybrid bonding**
- **TCB chip to wafer**
- **Embedded bridge die attach**
- **EVO multi module die attach**
- **Advanced flip chip**
- **Wafer/substrate molding**

Advanced Packaging Revenue Growing Rapidly 2.5D/3D Fastest Growing Segment

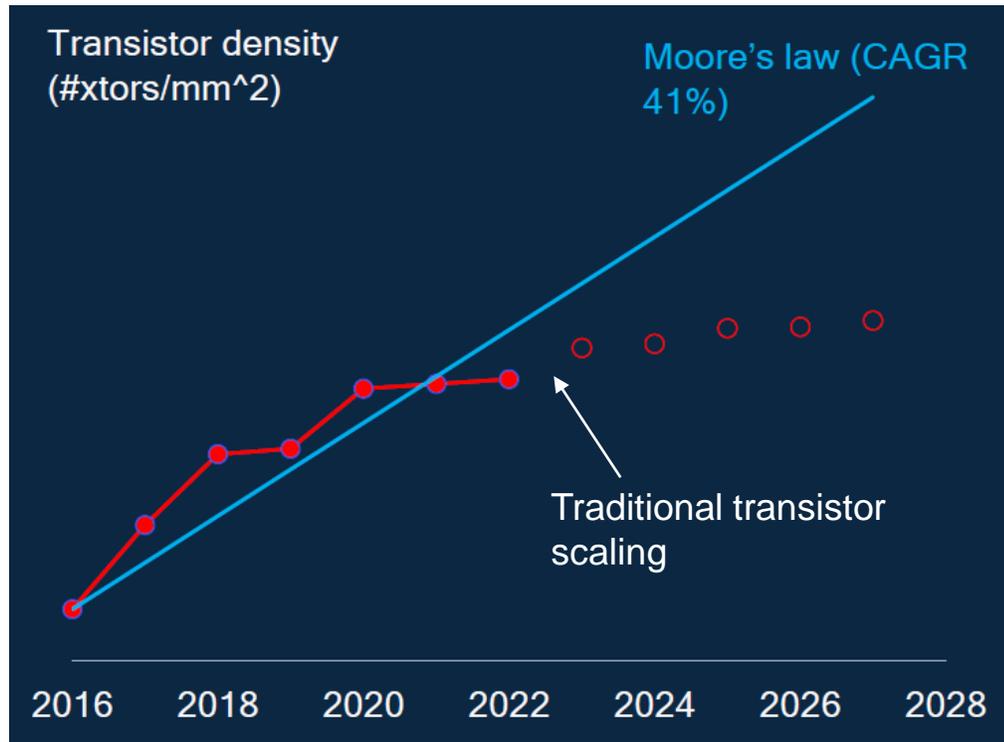


Besii Portfolio Well Positioned by Node Size and Accuracy

- 70% of Besii equipment revenue defined as advanced packaging
- 50% equipment revenue advanced die placement (< 7 micron accuracy)
- Most rapidly growing market segment

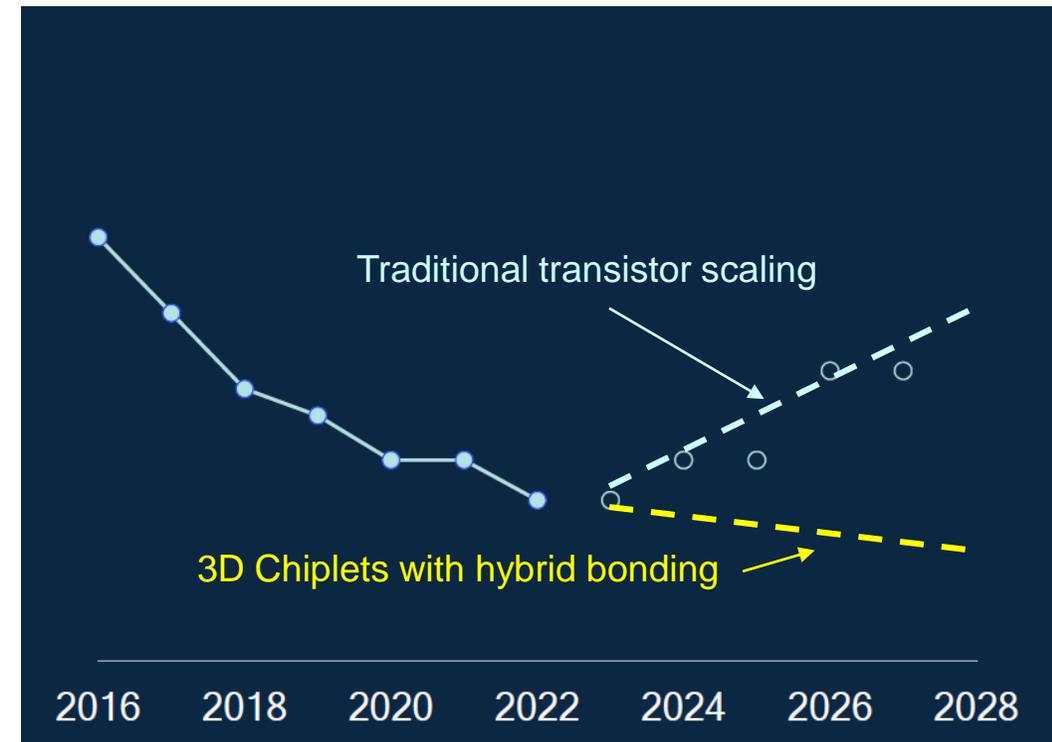
Source: Yole. November 2023

Moore's Law Scaling Is Slowing

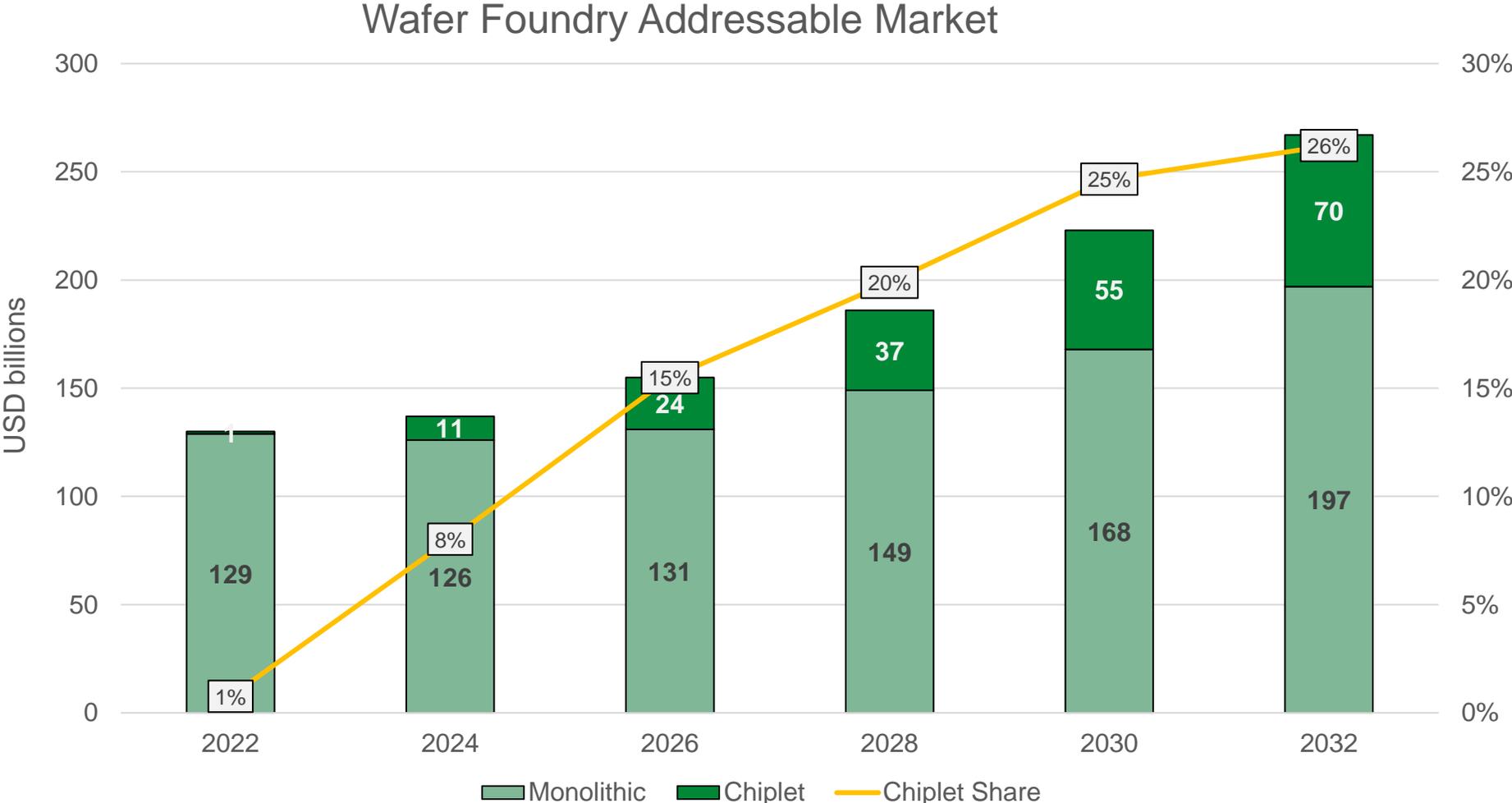


Source: Qualcomm and Besic

Cost Per Transistor Is Increasing



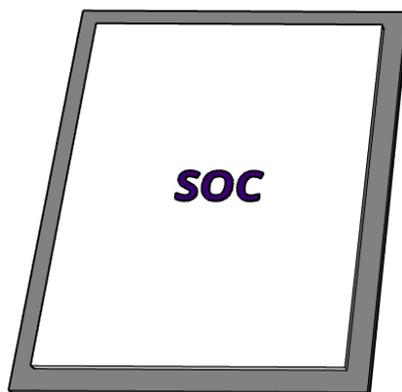
Chiplet Adoption Increasing Rapidly



Source: CSM foundry model, ISM foundry model

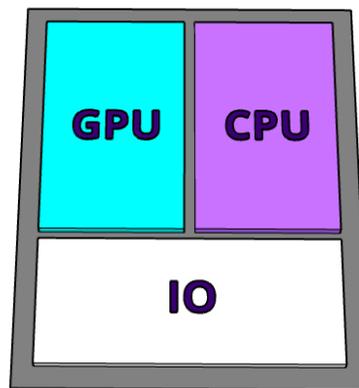
Chiplet Adoption Drives Higher Capital Intensity

Single Chip Design



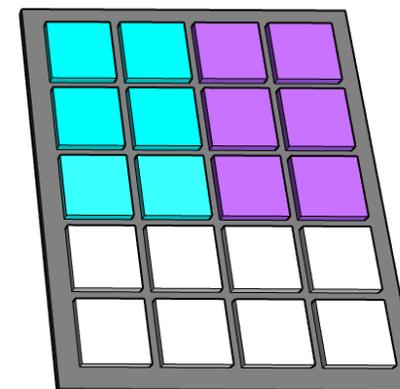
Monolithic: Integrated SoC

Multi Chip Module



Multiple Dies: process optimized

Multi Chiplet System



Individual IPs: process optimized

Source: Intel

1 Step

More die attach steps

Dozens

10 μ m

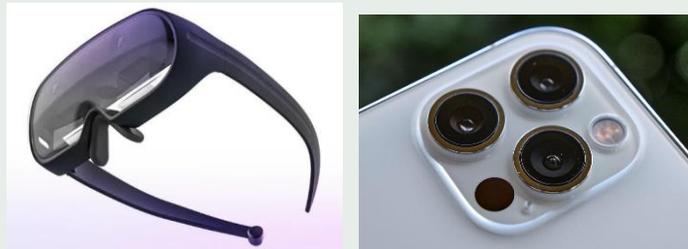
Higher accuracy

100nm

Mobile

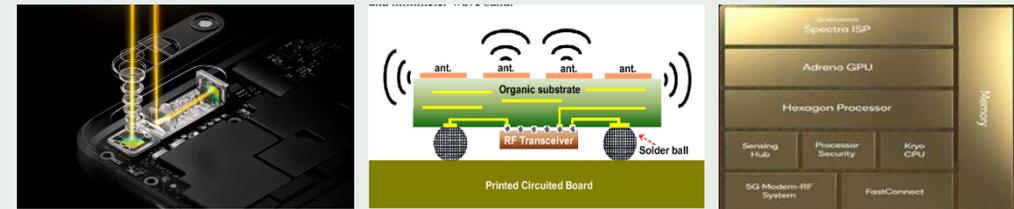
Drivers

- New generative AI engines
- Edge/AI enabled phones
- Advanced cameras and 3D imaging
- Under display biometric ID
- New AR/VR devices
- 5G advanced devices

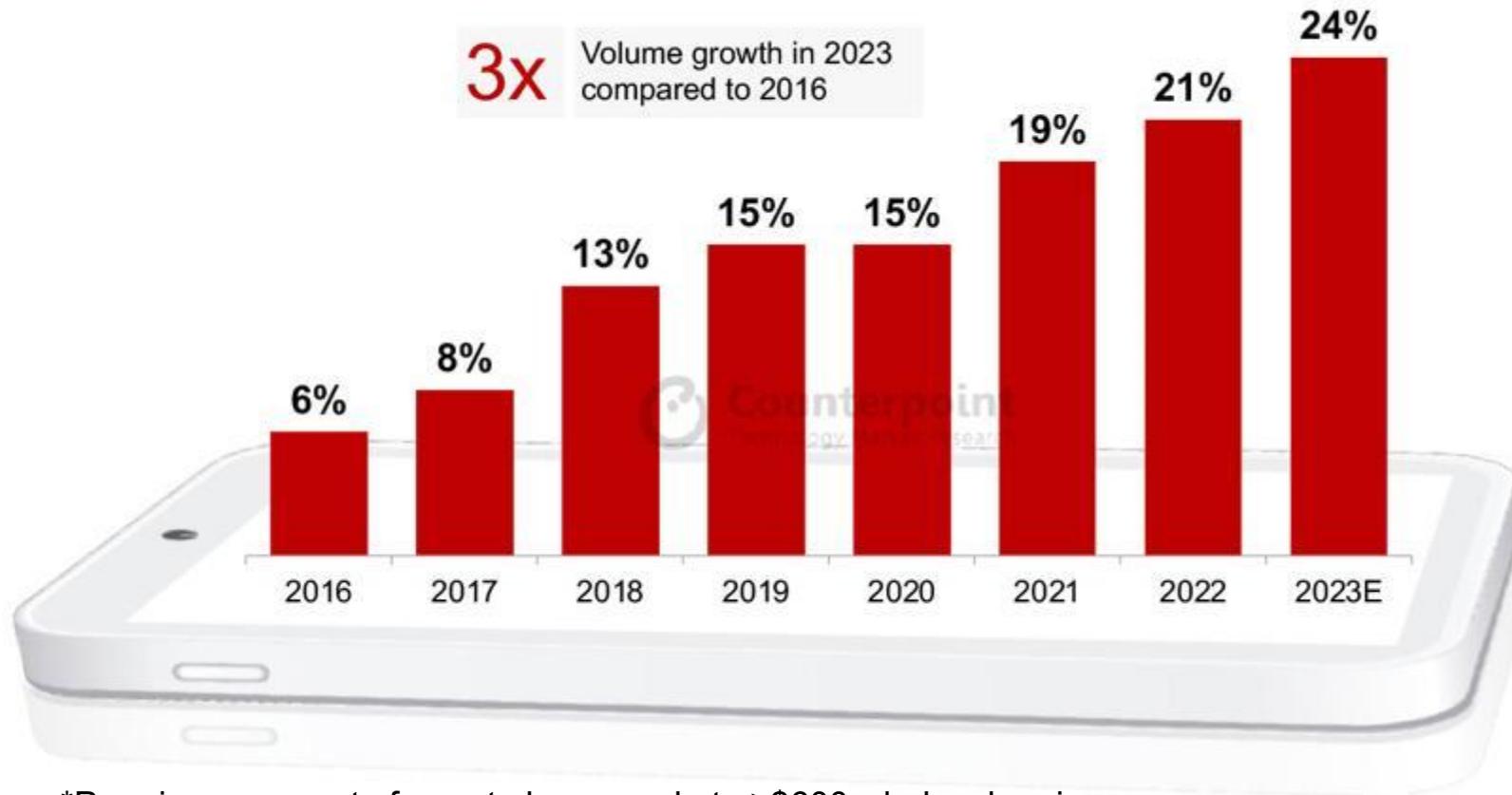


Assembly solutions

- Heterogeneous chiplet architectures
- Co-packaged optics
- Periscope camera modules
- Integrated sensing/camera/display
- Optical wave guide assembly
- Antennae in package



Premium Smart Phone Market Share Growing Rapidly



*Premium segment of smart phone market= \geq \$600 wholesale price

Source: Counterpoint Research's Market Pulse Service, Jan 2024

Computing

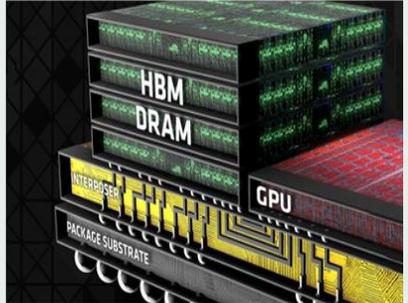
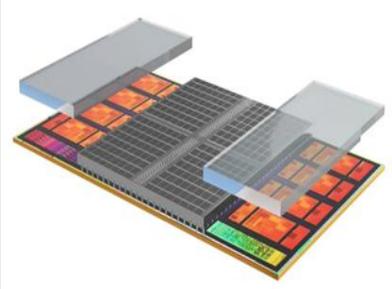
Drivers

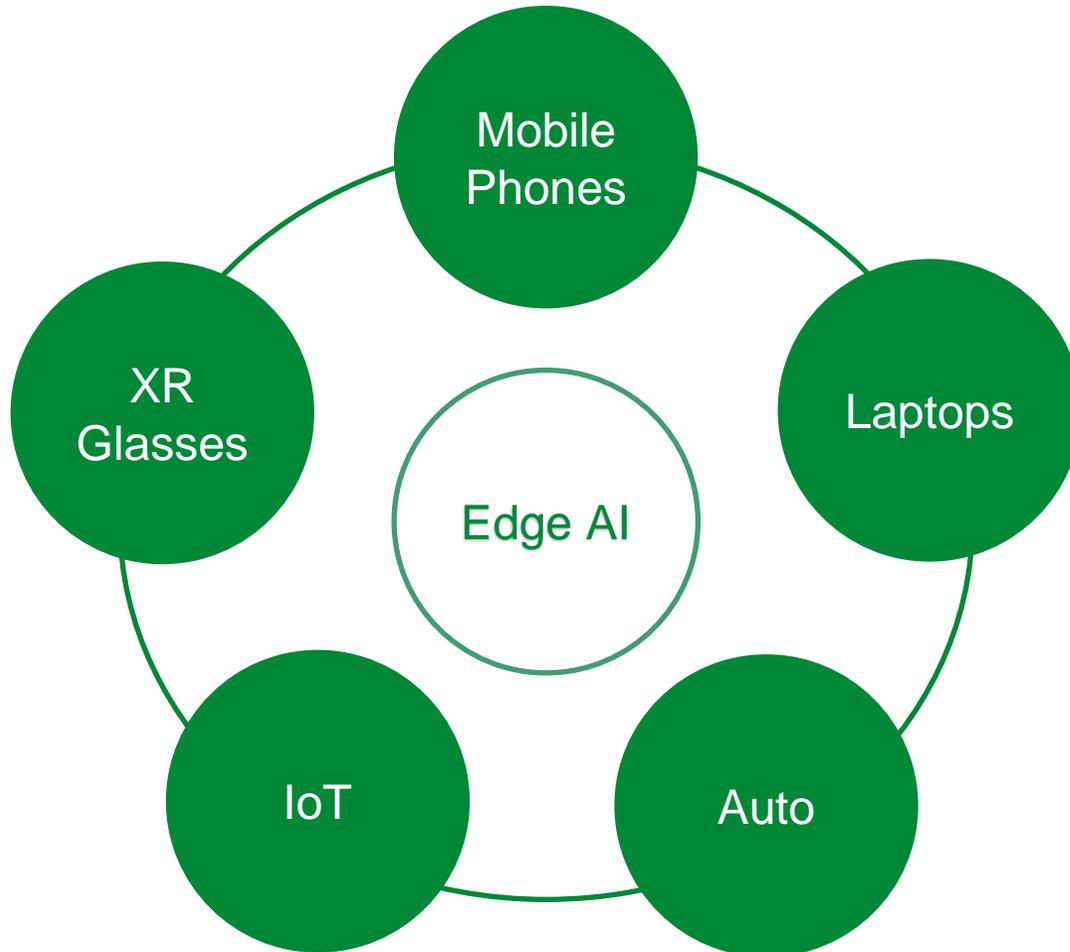
- Data volumes growing exponentially
- New generative AI engines
- Supercomputers
- Datacenters
- Edge AI tablets, PCs, laptops
- Gaming and infotainment



Assembly solutions

- 2.5D/3D chiplet architectures
- HBM memory stacking
- Co-packaged optics
- Optical transceivers





Edge AI Use Cases

Text Generation

Audio and Video Creation

Image and Video Enhancement

Code Generation

Medical Diagnostics

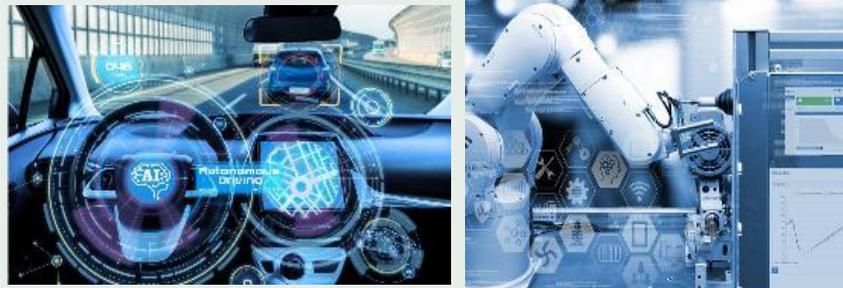
Auto Self-Driving

Environmental Monitoring

Auto/ Industrial

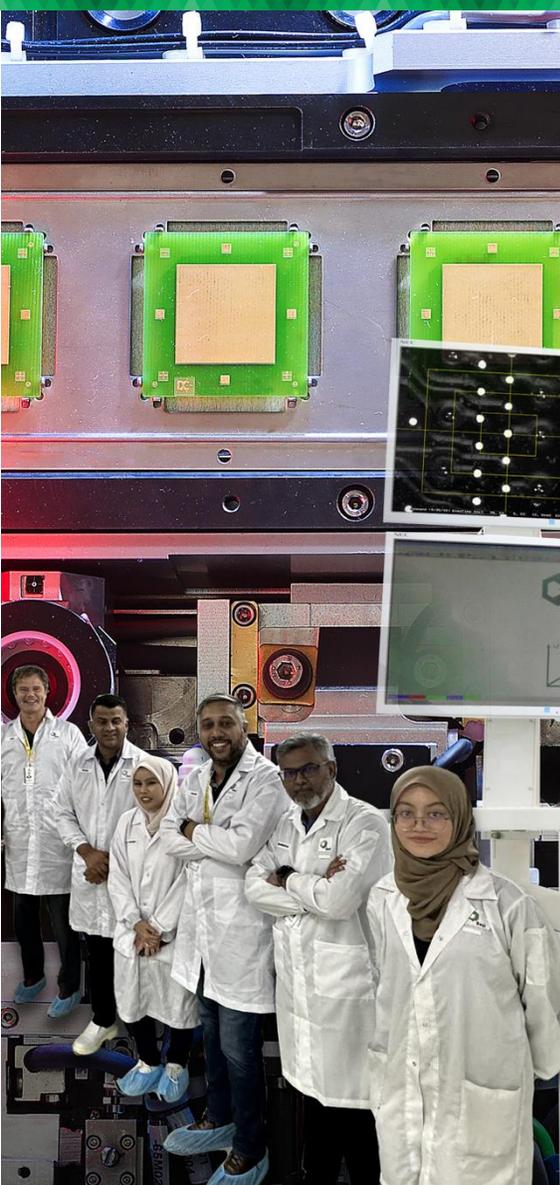
Drivers

- EV adoption
- Edge AI enhanced features
- SiC and GaN power devices
- Advanced camera modules and sensors
- Autonomous driving
- Factory automation 4.0



Assembly solutions

- Sinter bonding
- Soft solder die attach
- Diffusion bonding
- Multi module die attach
- Power module molding
- Advanced leadframe plating
- Wet chemical processing
- Extreme high precision trim & form



III. ESG

2023 Highlights

- ✓ Progress continues versus Besi's 2024 ESG targets
- ✓ Completed 76% of ESG initiatives developed since 2020
- ✓ Scope 1 & 2 emissions intensity declined by 38% versus 2021
- ✓ Energy from renewable sources increased to 71% versus 20% in 2021
- ✓ Set objective of net zero greenhouse gas emissions by 2030 in operations
- ✓ Launch of Design-to-X initiative to enhance sustainability and reduce cost
- ✓ Employee survey indicated high levels of participation and engagement. Six of seven categories above high-tech norm
- ✓ Conducted Double Materiality Assessment for European CSRD reporting in 2025
- ✓ Improved ratings with MSCI, Sustainalytics, ISS ESG and S&P Global

New ESG Initiatives to Reduce Besi's Environmental Impact



Malaysia	Netherlands	Austria	China	Switzerland
<ul style="list-style-type: none"> • Fewer shipments from the Netherlands to reduce waste and costs • Purchased renewable electricity at the additional Malaysia facility 	<ul style="list-style-type: none"> • Increased lighting energy efficiency • Installed smart meters • Reduced paper waste • Collaborated with Copernicus Institute for sustainable design 	<ul style="list-style-type: none"> • Expanded existing solar PV system • Installed groundwater heat pump 	<ul style="list-style-type: none"> • Installed centrifuge to increase water recycling • Purchased EV vehicles • Installed EV charging points 	<ul style="list-style-type: none"> • Collaborated with University of Applied Sciences and Arts for sustainable design • Expanded LED lighting systems



Design-to-X initiative incorporates Design-to-Cost and Design-to-Sustainability concepts in product design



2024

75% renewable sources for global energy needs

62% reduction in Scope 1 & 2 emissions*

12% reduction in Scope 3 emissions*

Above-benchmark employee engagement

Compliance with CSRD

2030

100% renewable sources for global energy needs

Carbon neutral for Scope 1 & 2 emissions*

20% reduction in Scope 3 emissions*

Achieve revenue objectives with lower environmental impact

80% vendor compliance with Conflict Free Sourcing Initiative

Carbon Neutral By 2050

* As per Greenhouse Gas Protocol. Targets relative to 2021 baseline data

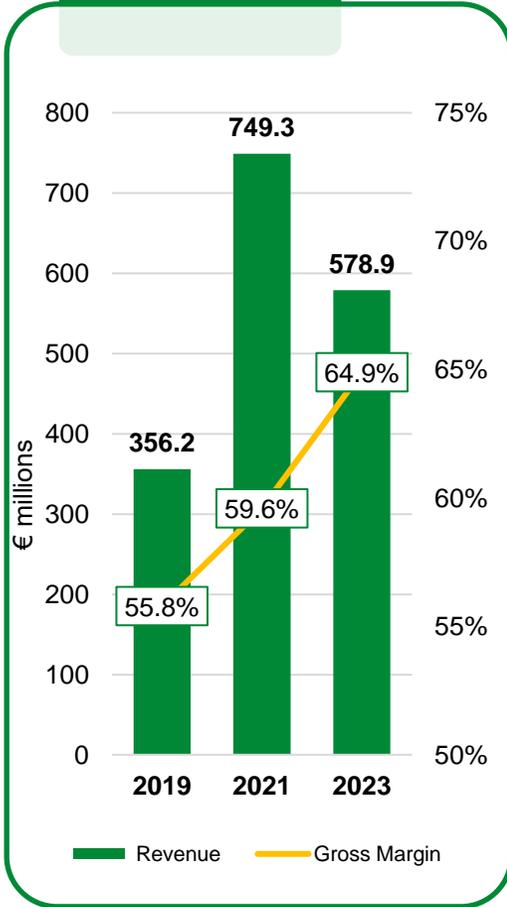


IV. FINANCIAL REVIEW

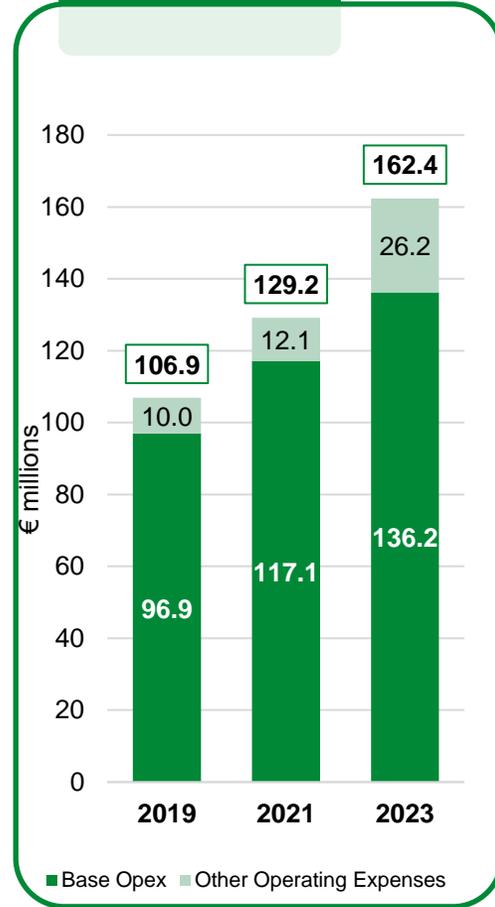
Key Financial Metrics 2019 – 2023



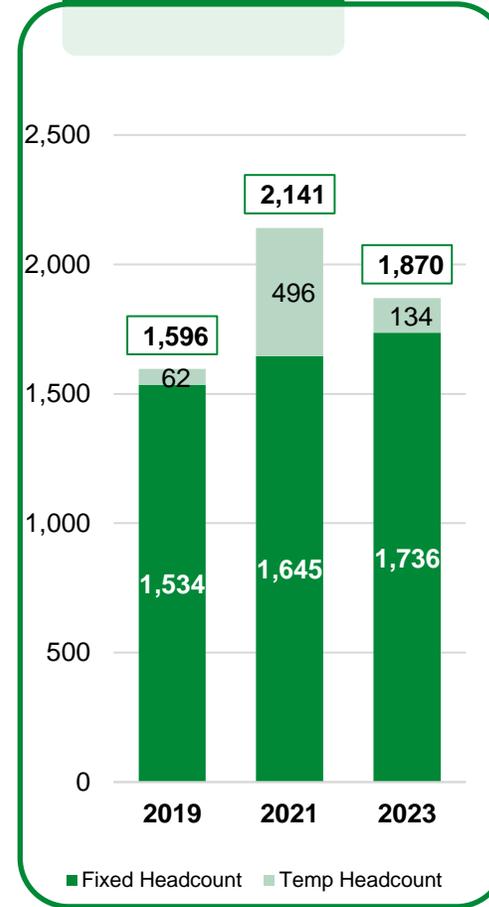
Revenue & Gross Margin



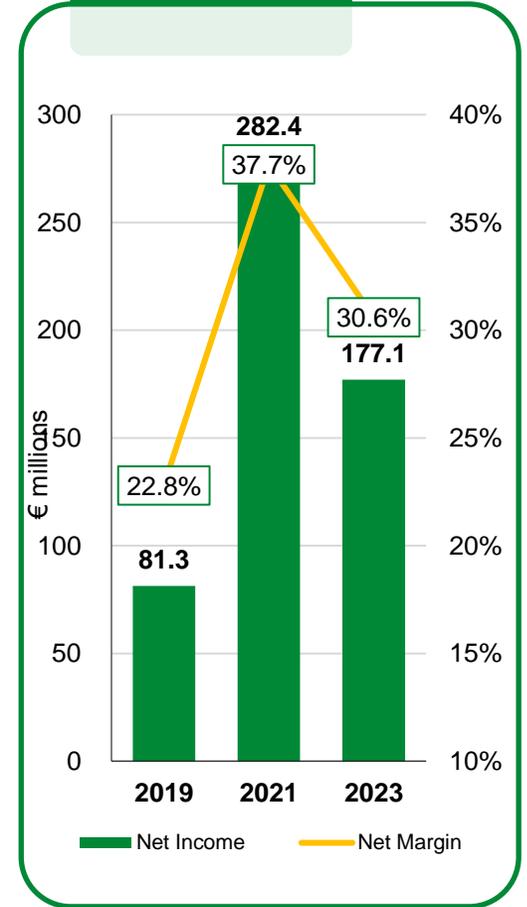
Baseline Opex



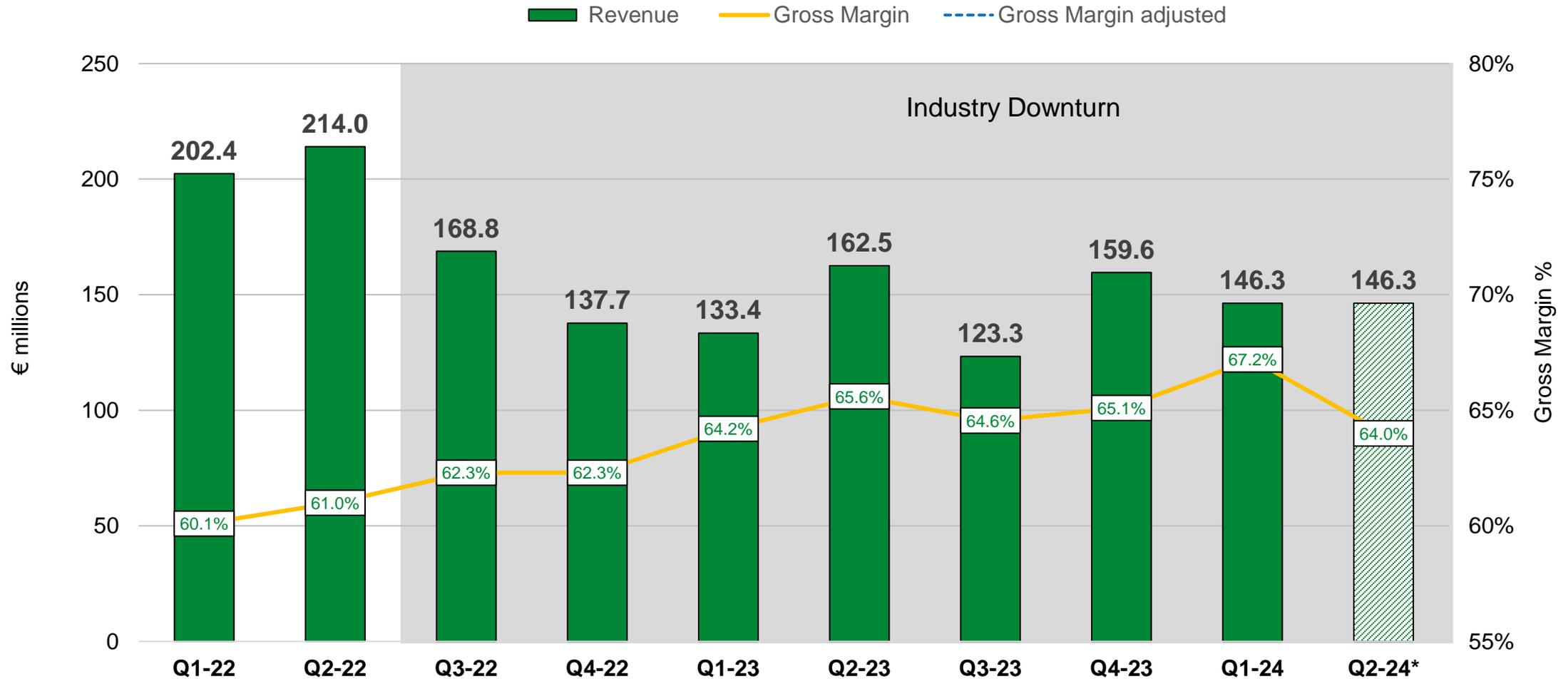
Headcount



Net Income

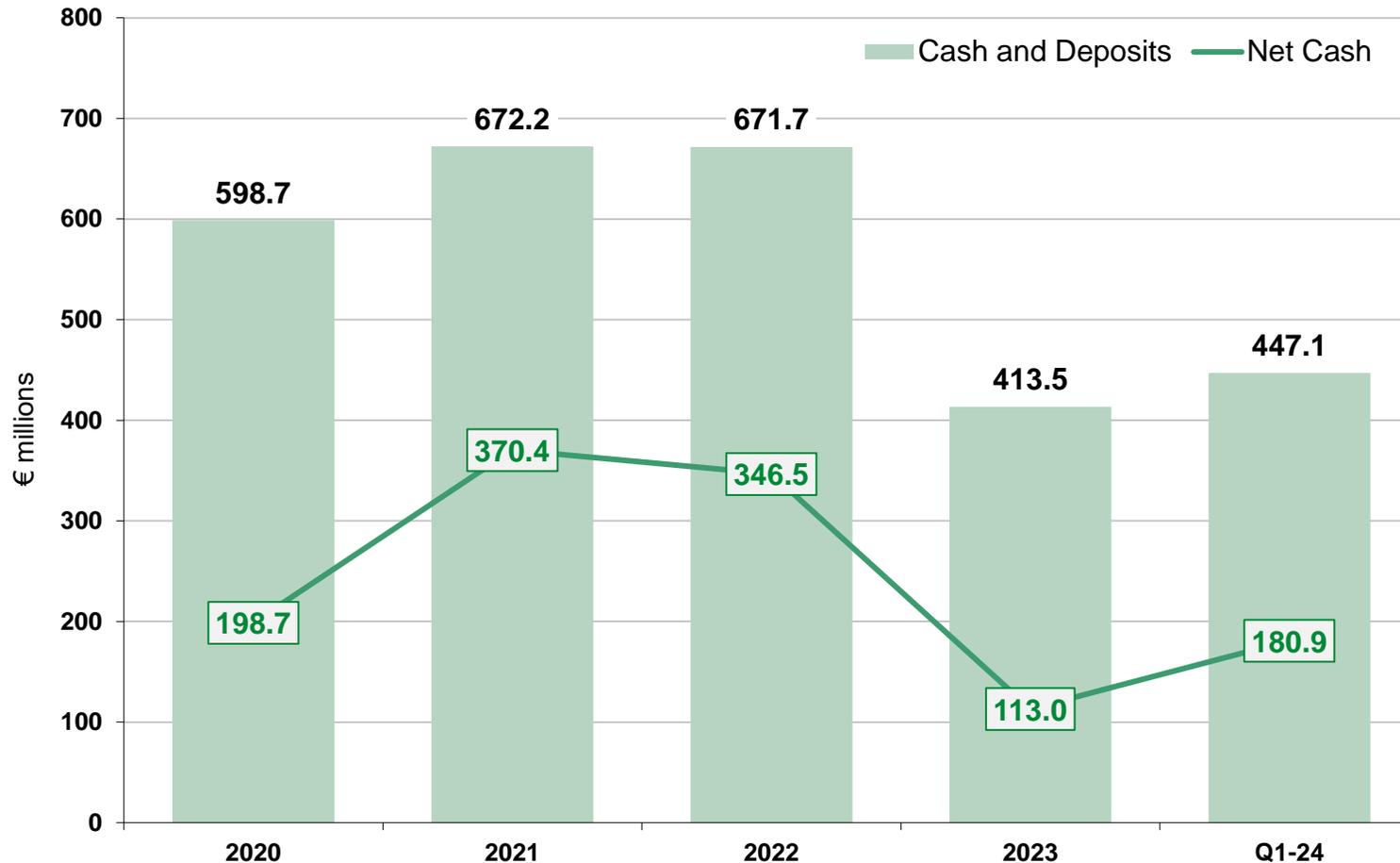


Through Cycle Gross Margin Resilience and Growth



* At midpoint of guidance range.

Strong Liquidity Position Maintained. Cash and Net Cash Increasing



- **Solid cash flow generation:**
 - Net cash of € 113.0 million at year end (-67.4%)
 - Includes outflows of € 435.5 million for dividends and share repurchases (+ € 19.2 million vs. 2022)
- **Attractive funding to help finance growth:**
 - **Convertible debt:**
 - Per year-end: € 328.2 million outstanding
 - Per April 25, 2024: € 200.5 million outstanding
 - Blended interest rate 1.73%
 - **Revolving credit facility**
 - € 80 million expandable to € 136 million



V. Q1-24 RESULTS & OUTLOOK

Q1-24 Revenue and Operating Income Above Midpoint of Guidance



€ millions	Guidance Q1-24*	Q1-24	Δ Q4-23	Δ Q1-23
Revenue	Down 5%-15%	146.3	-8.3%	+9.7%
Orders		127.7	-23.3%	-10.1%
Gross Margin	64-66%	67.2%	+2.1pts	+3.0pts
Opex	+50-55%	57.6	+52.4%	+30.9%
Operating Income	35.8***	40.7	-38.4%	-2.4%
Net Income		34.0	-38.1%	-1.4%
EPS Basic		0.44	-38.0%	-
Adj. Net Income**		49.5	-14.2%	+15.1%
Net Cash		180.9	+60.1%	-44.5%

* As compared to Q4-23

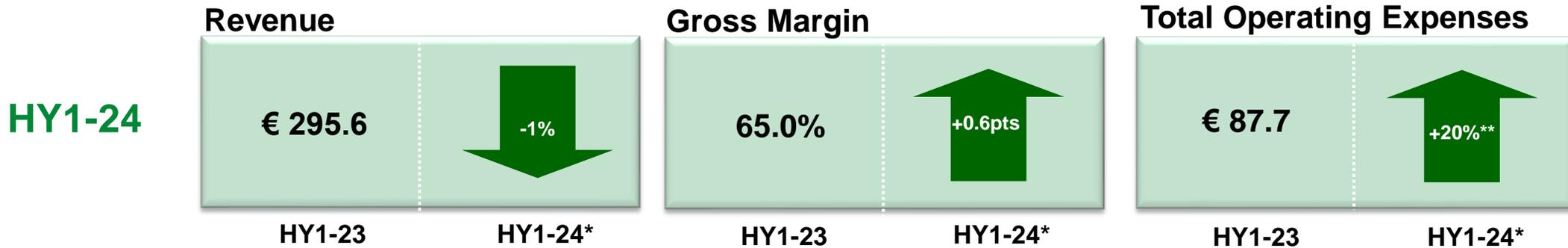
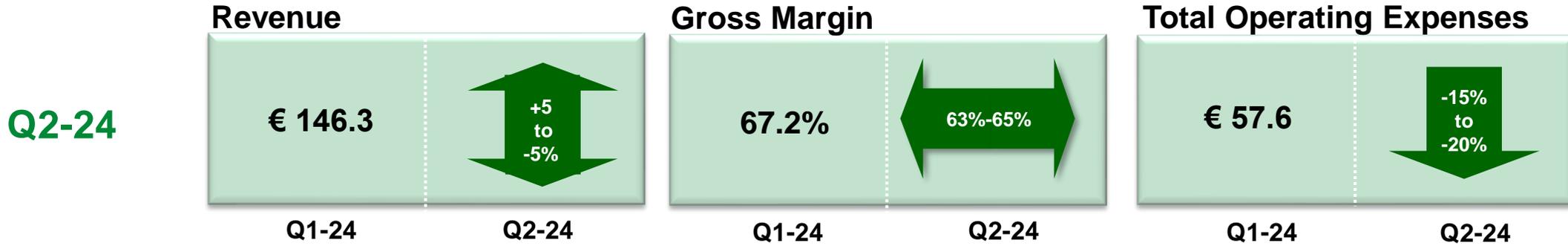
** Adjusted to exclude share-based compensation expense in each respective period.

*** At midpoint of guidance range

Guidance Q2-24 & H1-24



€ in millions



* At midpoint of Q2-24 guidance, compared to HY1-23

** Ex share-based compensation operating expenses are expected to increase by 11% at midpoint of guidance