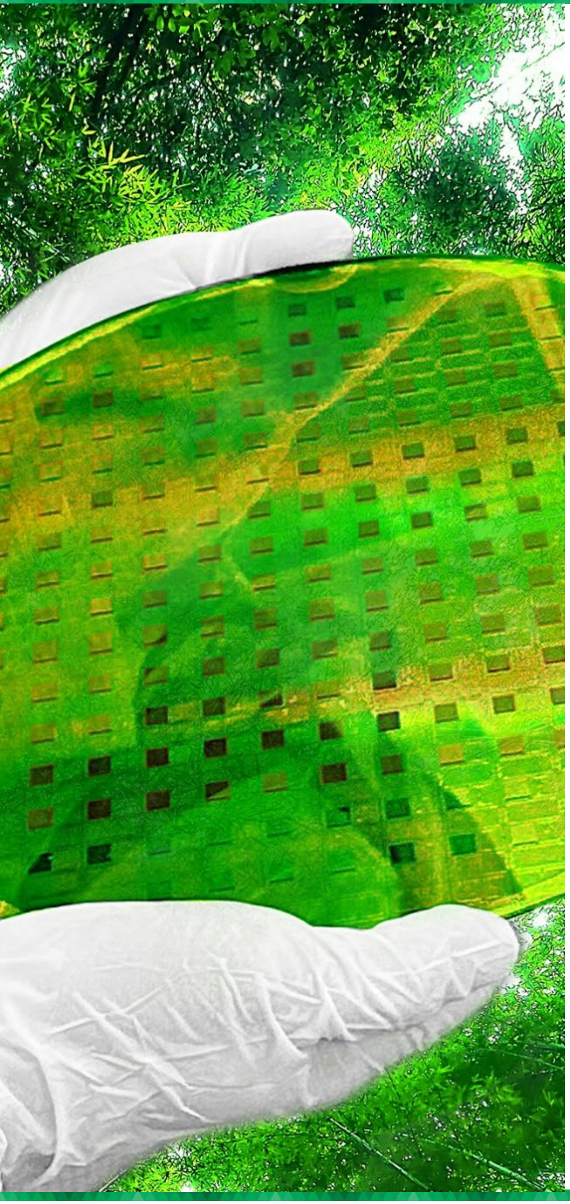


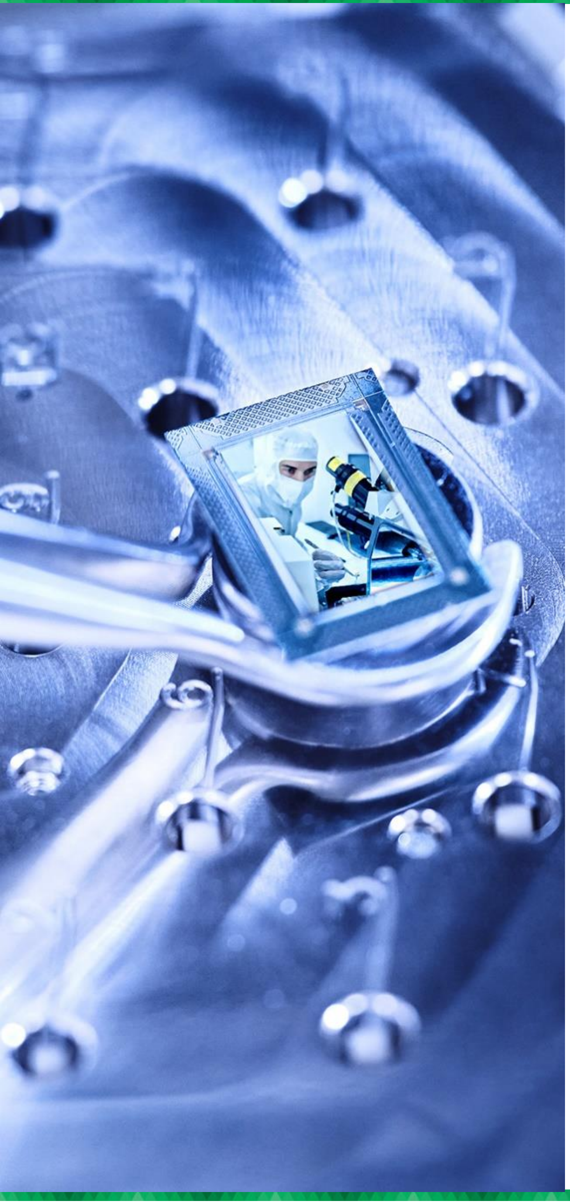
INVESTOR PRESENTATION
Q1-23 RESULTS

April 26, 2023

Safe Harbor Statement

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 pandemic and measures taken to contain the outbreak, 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 as a result of the COVID-19 pandemic; those additional risk factors set forth in Besi's annual report for the year ended December 31, 2022 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.

Table of Contents



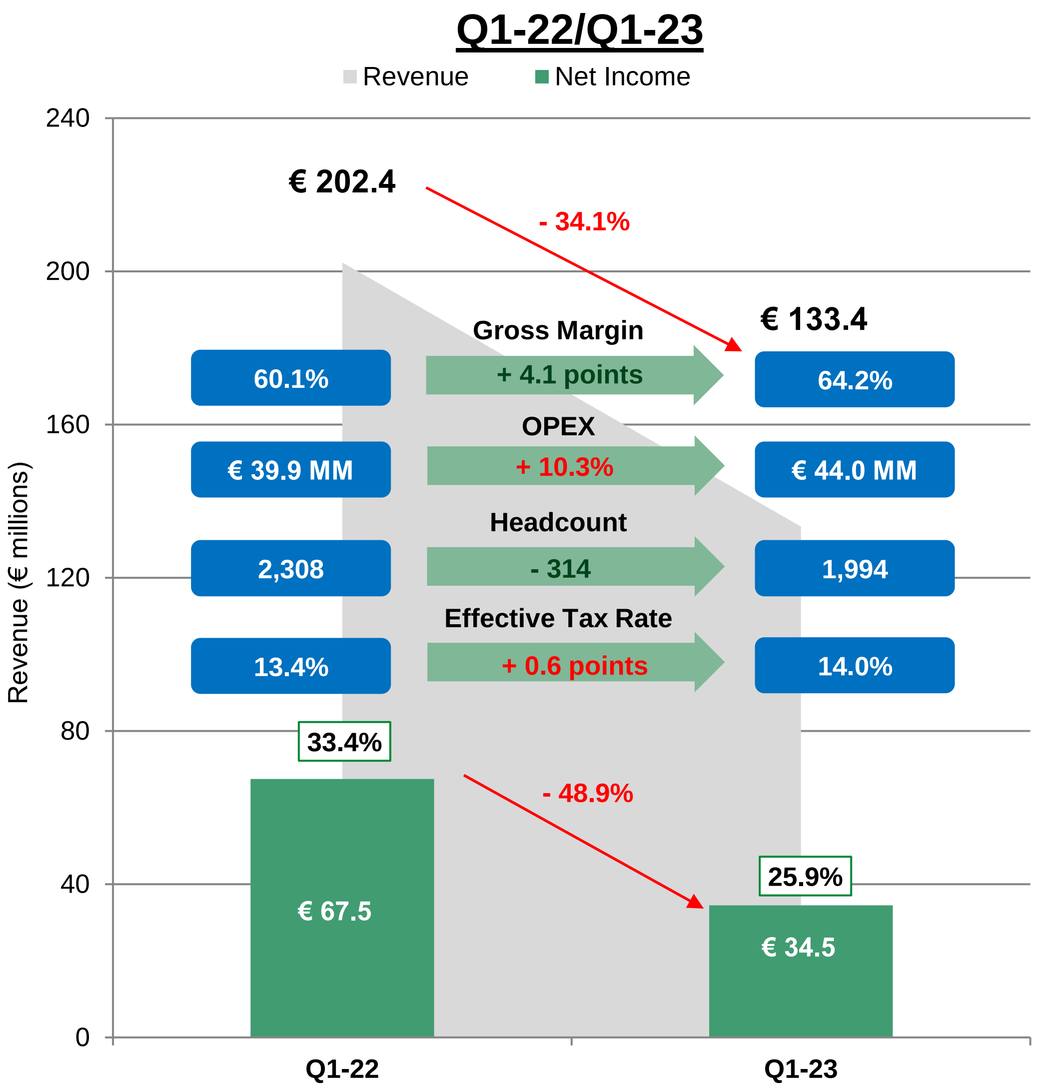
I. KEY HIGHLIGHTS

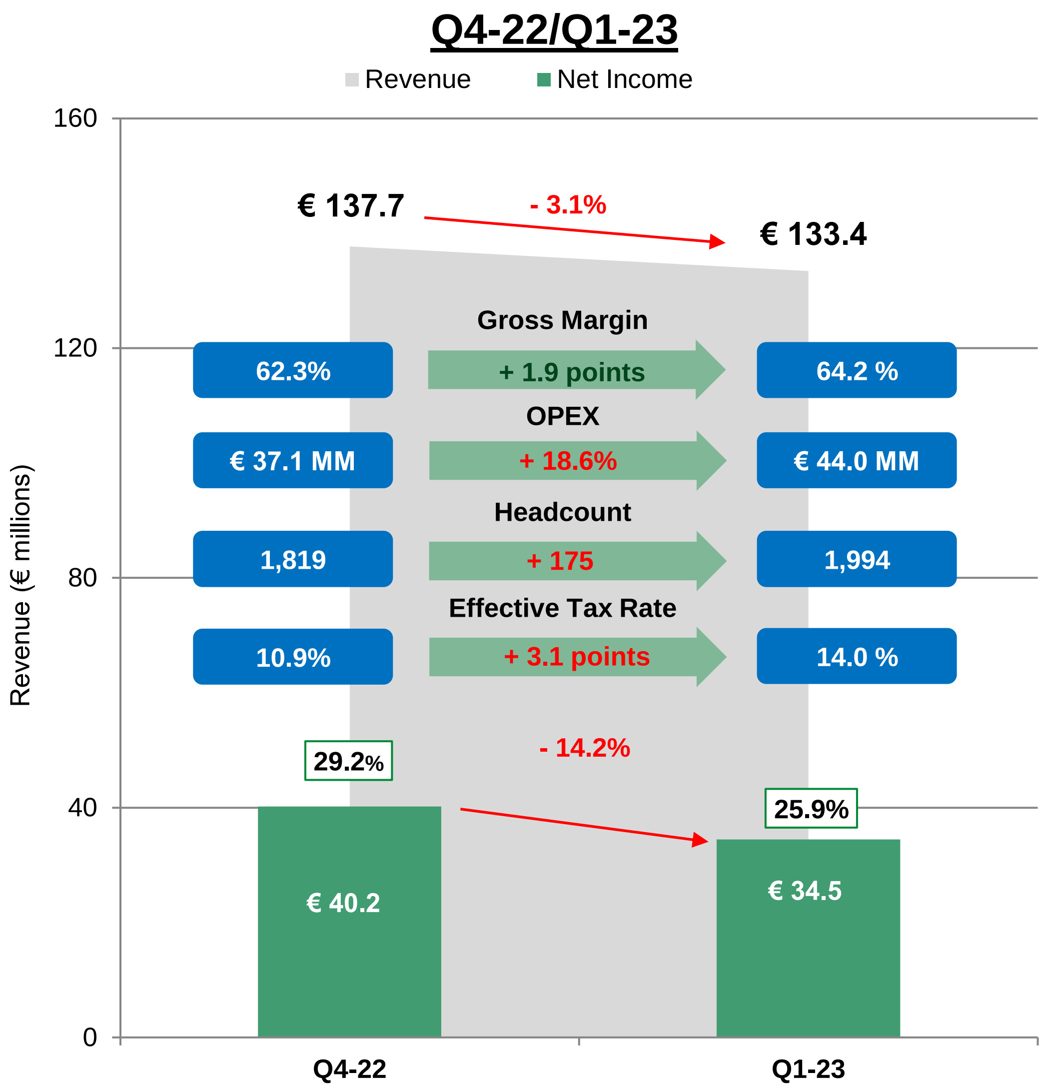
Strong Performance In Current Industry Downturn

€ millions	Guidance Q1-23*	Q1-23	Δ Q4-22	Δ Q1-22
Revenue	Down 0%-10%	**133.4**	-3.1%	-34.1%
Orders		**142.0**	-21.3%	-30.7%
Gross Margin	61-63%	**64.2%**	+1.9pts	+4.1pts
Opex	+15-20%	**44.0**	+18.6%	+10.3%
Operating Income	37.6***	**41.7**	-14.4%	-49.0%
Net Income		**34.5**	-14.2%	-48.9%
EPS Basic		**0.44**	-13.7%	-49.4%
Adj. Net Income**		**43.0**	+1.7%	-43.0%
Net Cash		**325.8**	-6.0%	-20.0%

* As compared to Q4-22
** Adjusted to exclude share-based compensation expense in each respective period.
*** At midpoint of guidance range

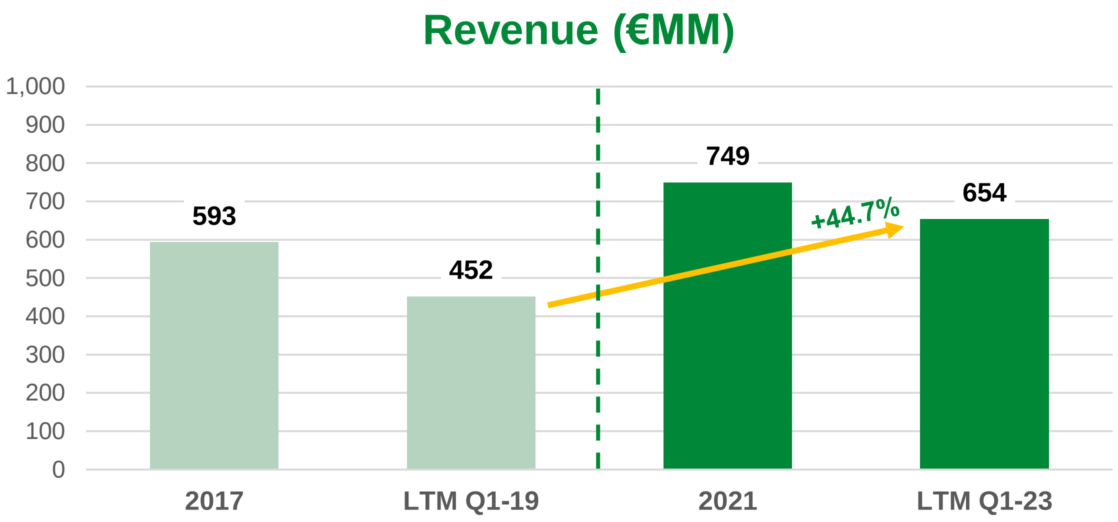
Profit Efficiency Maintained in Challenging Industry Environment

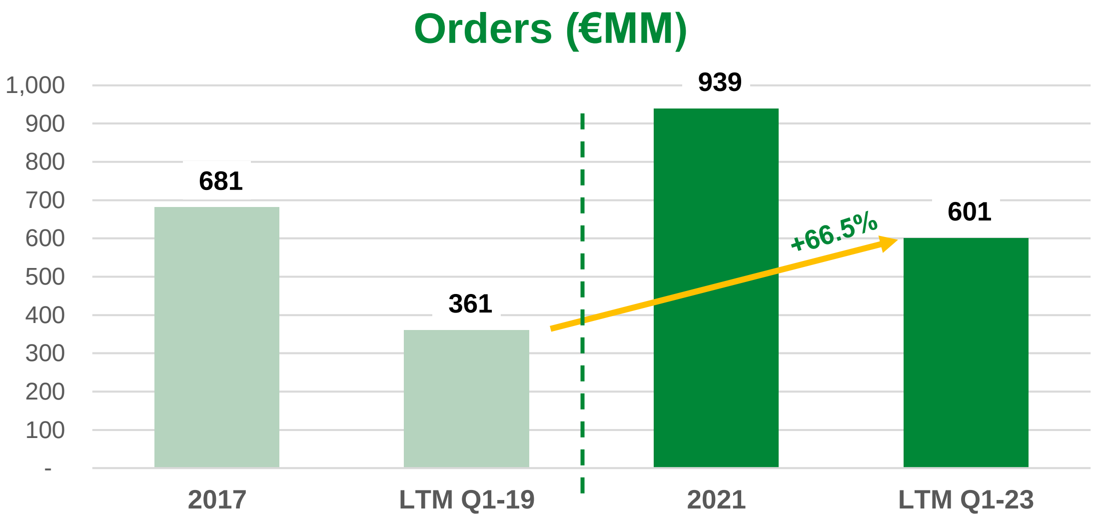


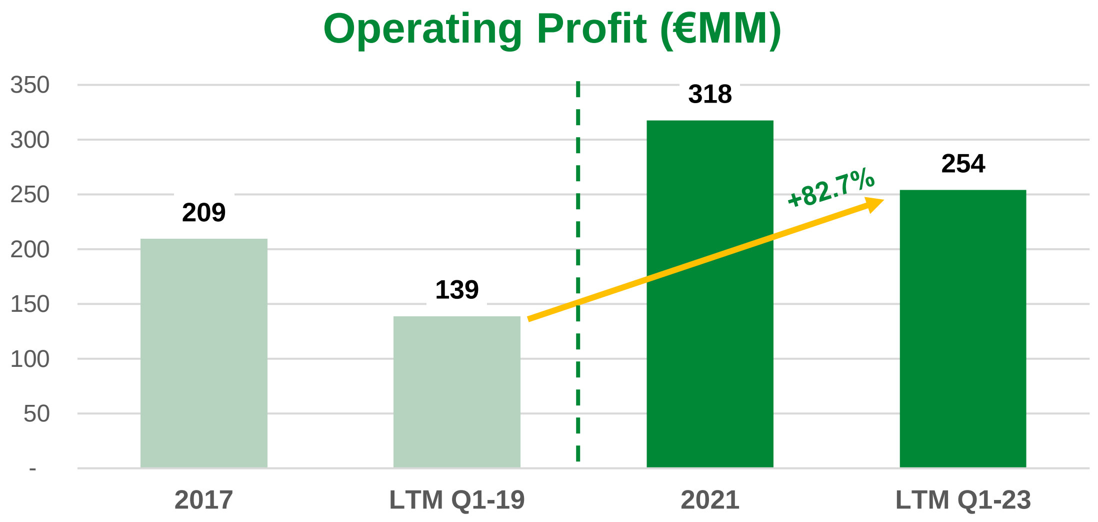


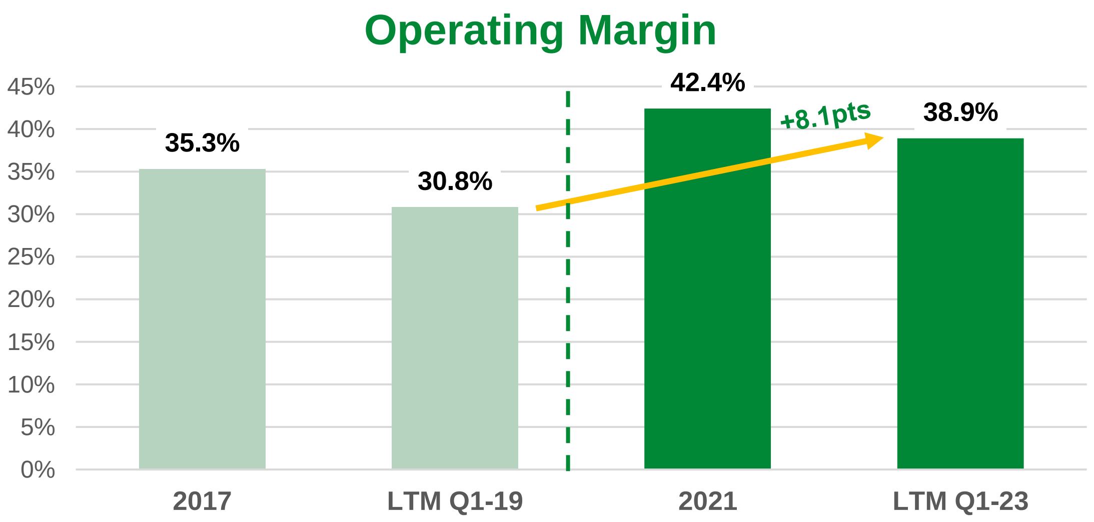
* Excluding share-based compensation expense, Besi's adjusted net income (net margin) would have been € 43.0 million (32.2%), € 42.3 million (30.7%) and € 75.5 million (37.3%) in Q1-23, Q4-22 and Q1-22, respectively.

Performance Significantly Above Last Industry Downturn

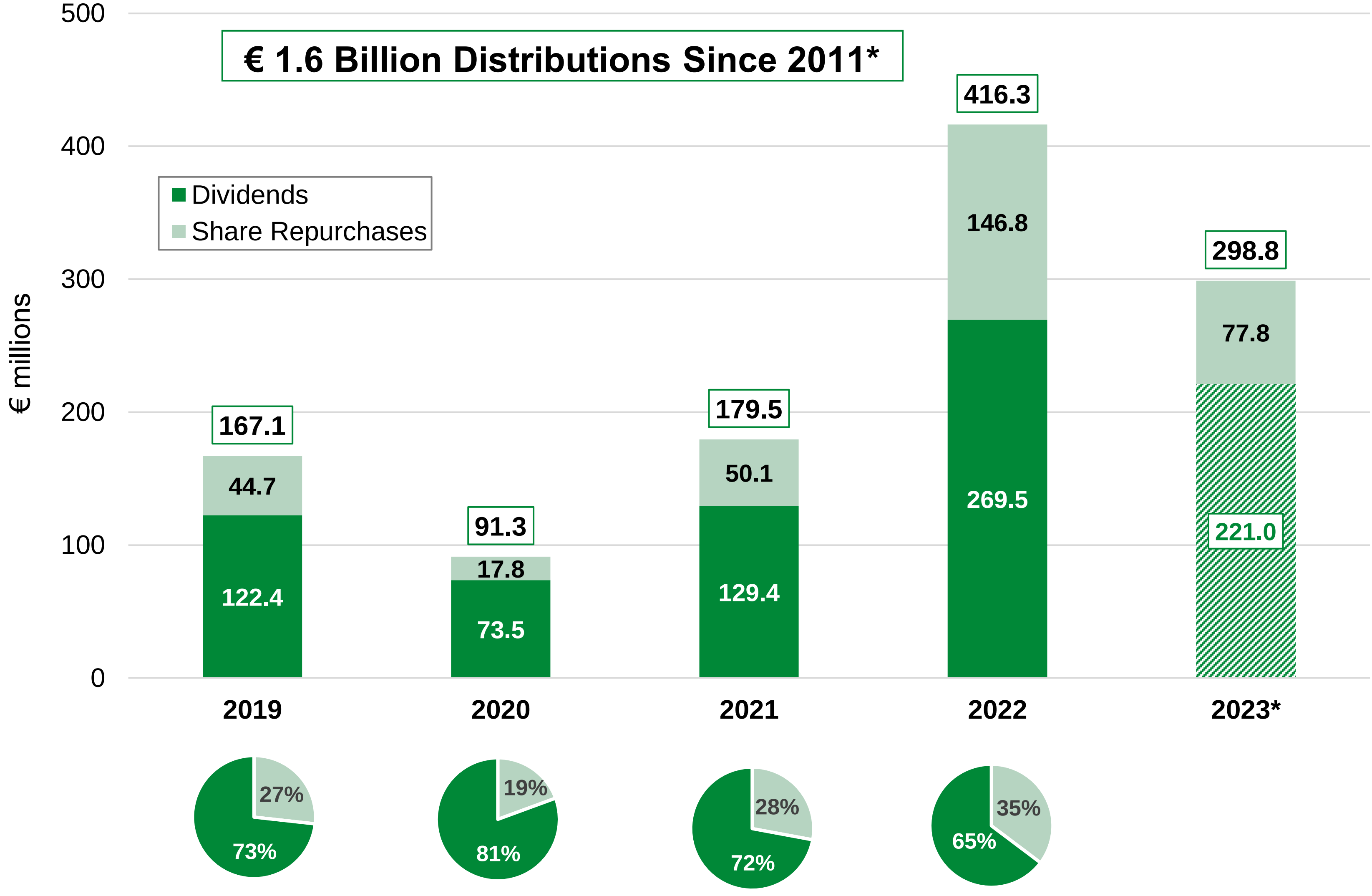








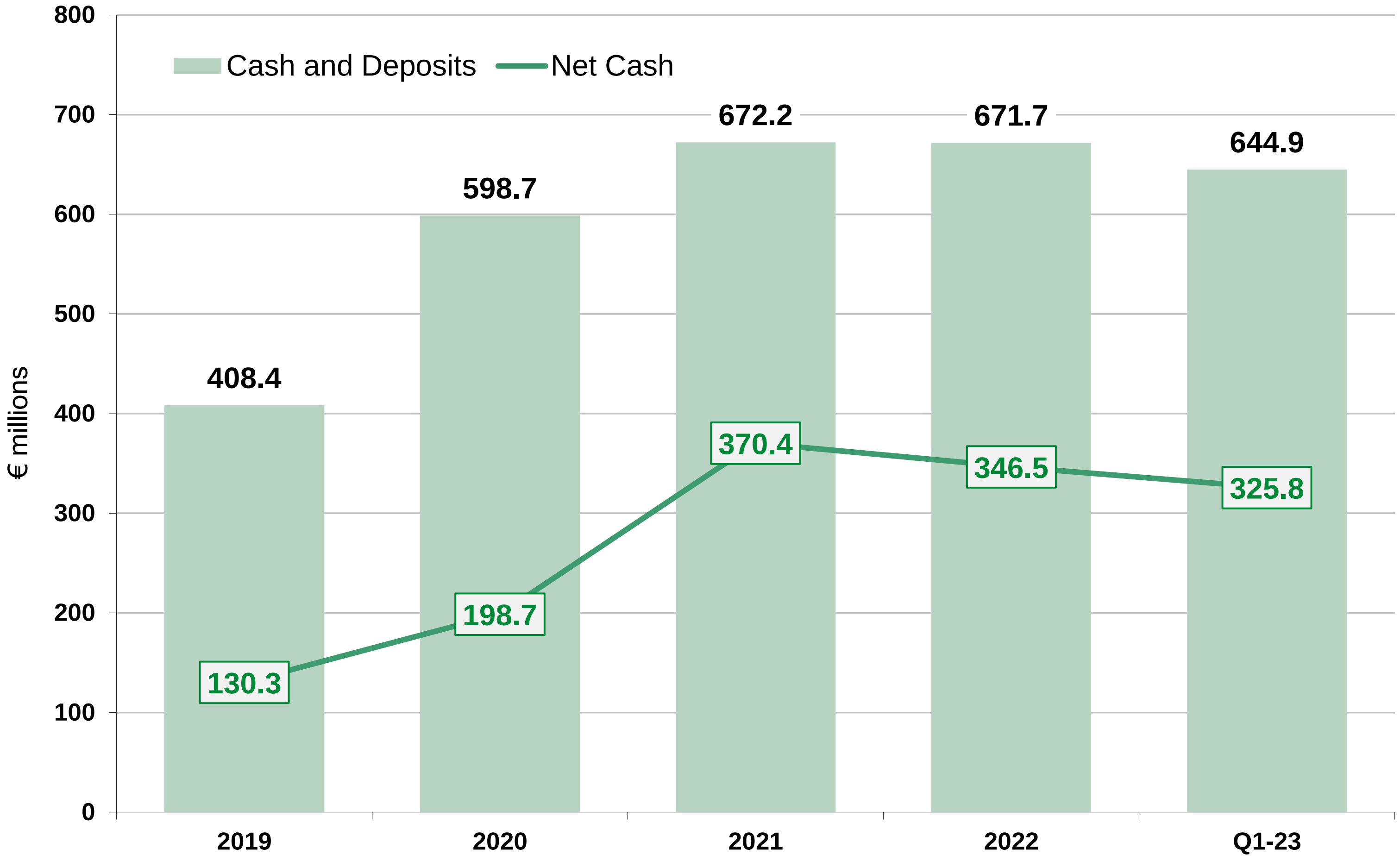
Capital Allocation Increasing



- **~ € 300 million distributed upon payment of upcoming dividend**
- **Current € 300 million share buyback program:**
  - ~ € 75 million per quarter
  - ~2.9 million shares purchased through Q1-23 for € 174.1 million
  - Expected completion: October 2023

* Includes proposed dividend of € 2.85 per share for approval at 2023 AGM and share repurchases through March 31, 2023

Strong Liquidity Position Maintained

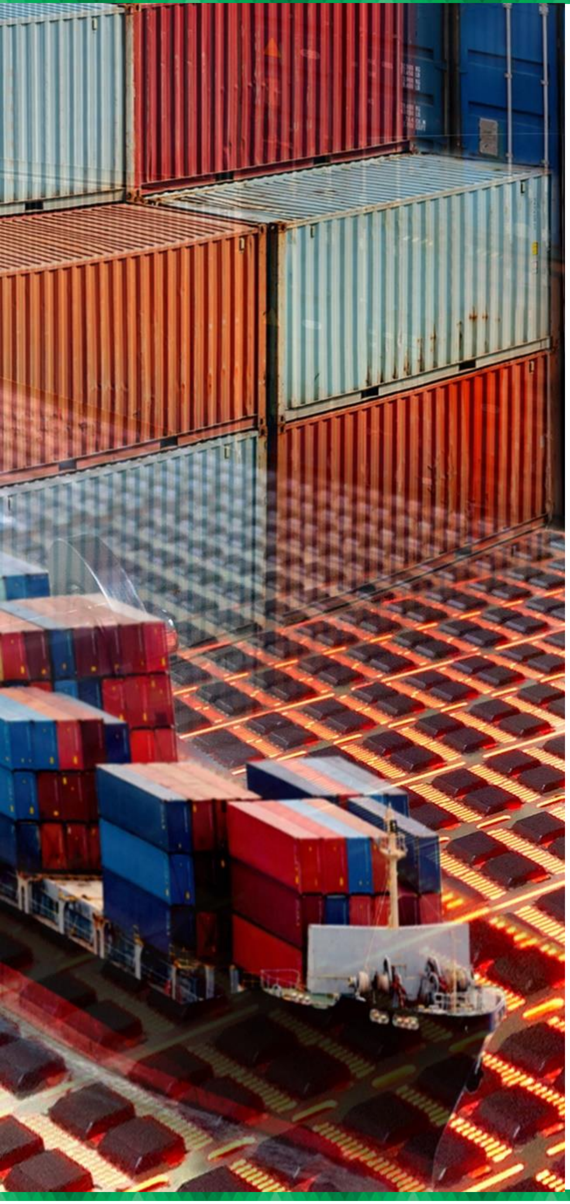


Q1-23 vs. Q4-22

- Cash and deposits of € 644.9 million
  - -€ 26.8 million primarily due to:
    - + € 61.4 million cash flow from operations
    - - € 77.8 million share repurchases
    - - € 5.4 million capitalized R&D
    - - € 1.1 million capex
- Net cash decreases 6% to € 325.8 million
  - Equals 50% of LTM revenue

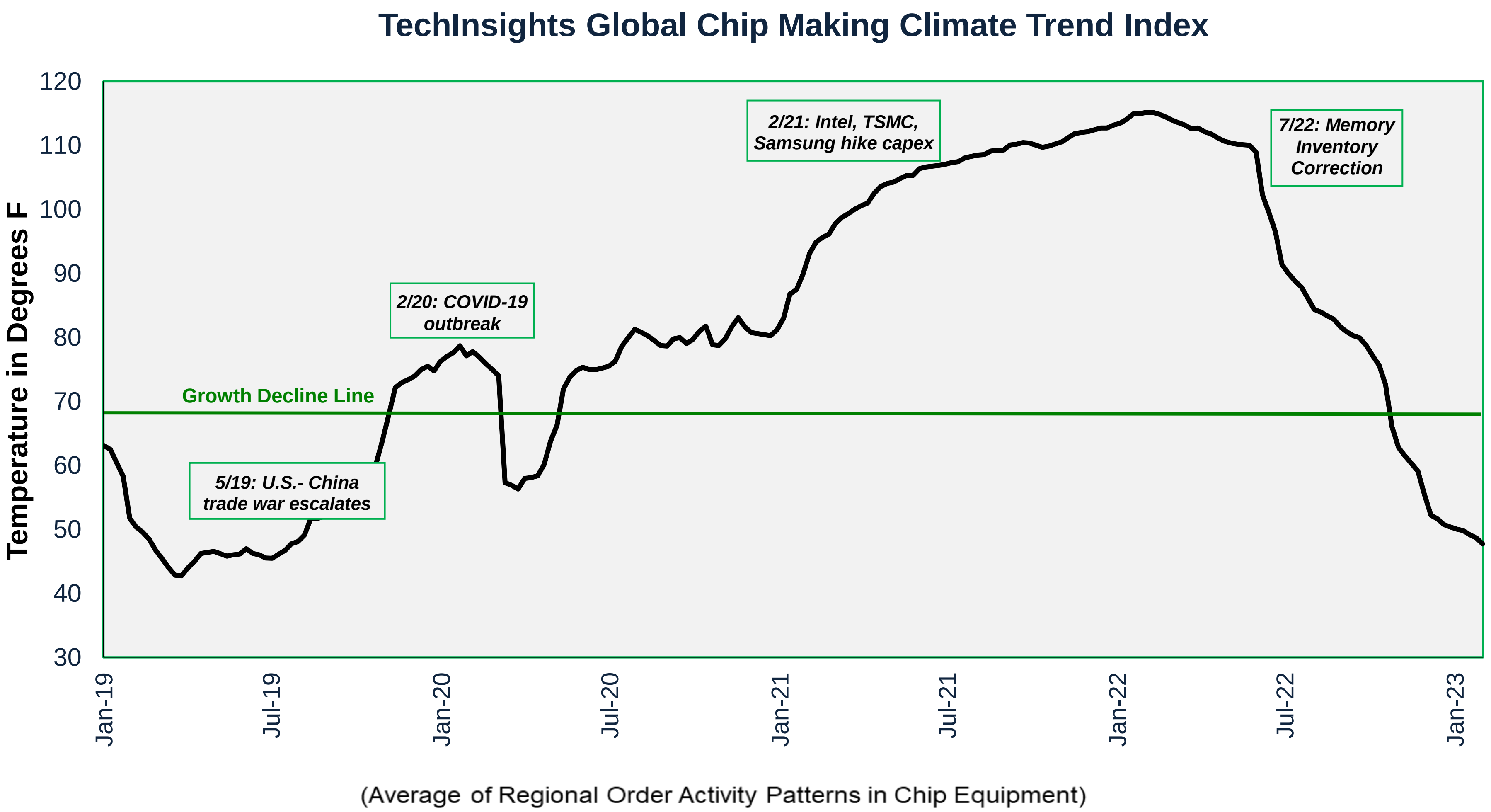
Convertible Notes

- € 339.0 million outstanding at April 25, 2023
  - € 7.9 million converted in Q1-23
  - € 13.0 million converted in Q2-23
- 2024 Notes reduced to € 13.4 million
- 2023 Notes reduced to € 0.6 million



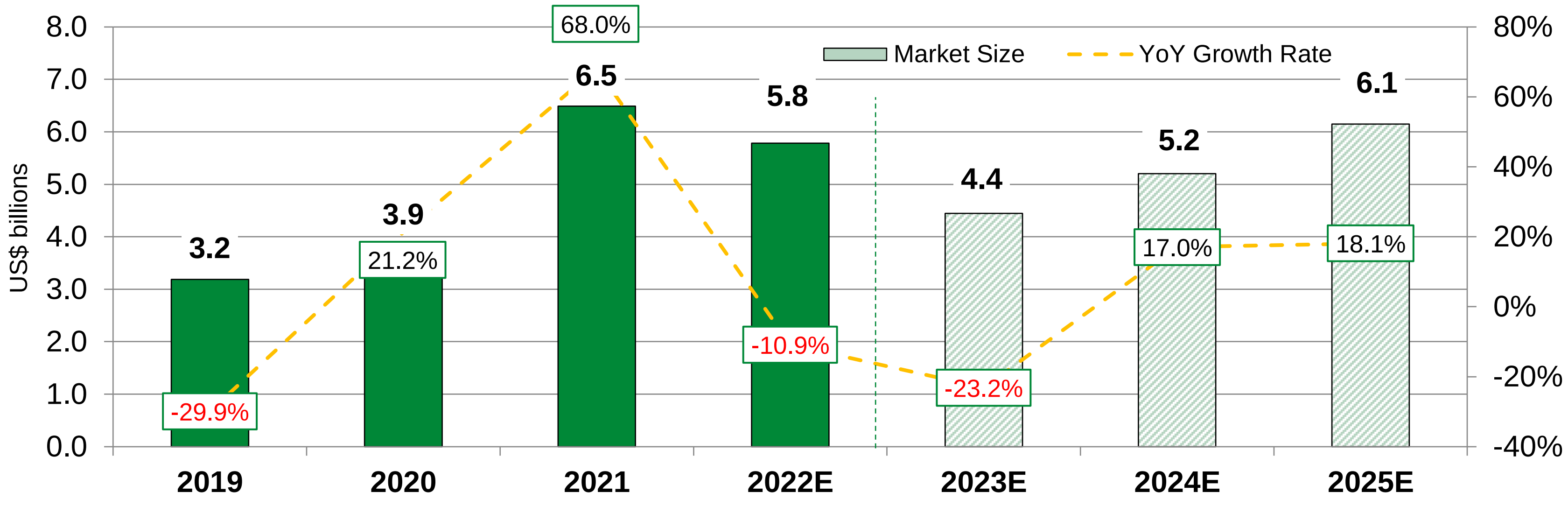
II. MARKET & STRATEGY

Industry Downturn Continues in 2023

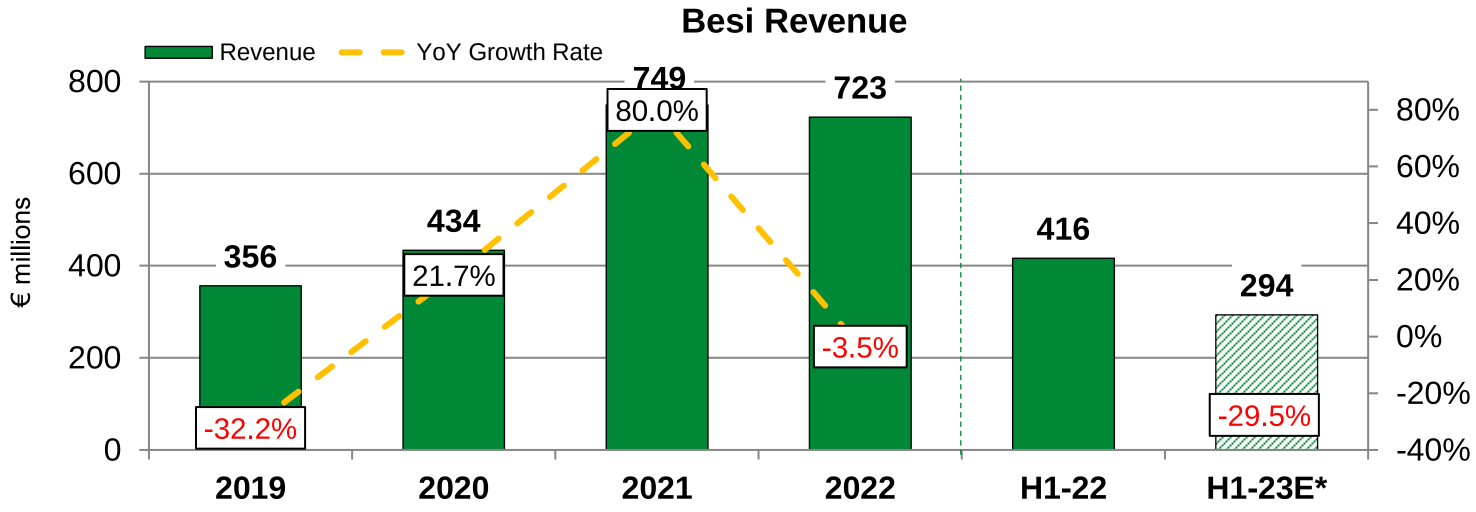


Source: TechInsights, March 2023

Assembly Market Estimates Reduced Rebound Forecast 2024-2025



Source: TechInsights, April 2023. Assembly equipment revenue excludes hybrid bonding contribution and service revenue.



* At midpoint of Q2-23 guidance

TechInsights now forecasts 23.2% downturn in 2023
- Versus -16.8% prior forecast
- Market decreases to $4.4 billion
- ~32% decrease from 2021 peak
- Strong rebound anticipated in 2024 and 2025

Strong secular fundamentals intact:
- AI, datacenter, HPC, 5G primary drivers
- Investment in new process technologies: hybrid bonding/CSP
- Onshoring new advanced packaging fabs

Strategy Update

Business

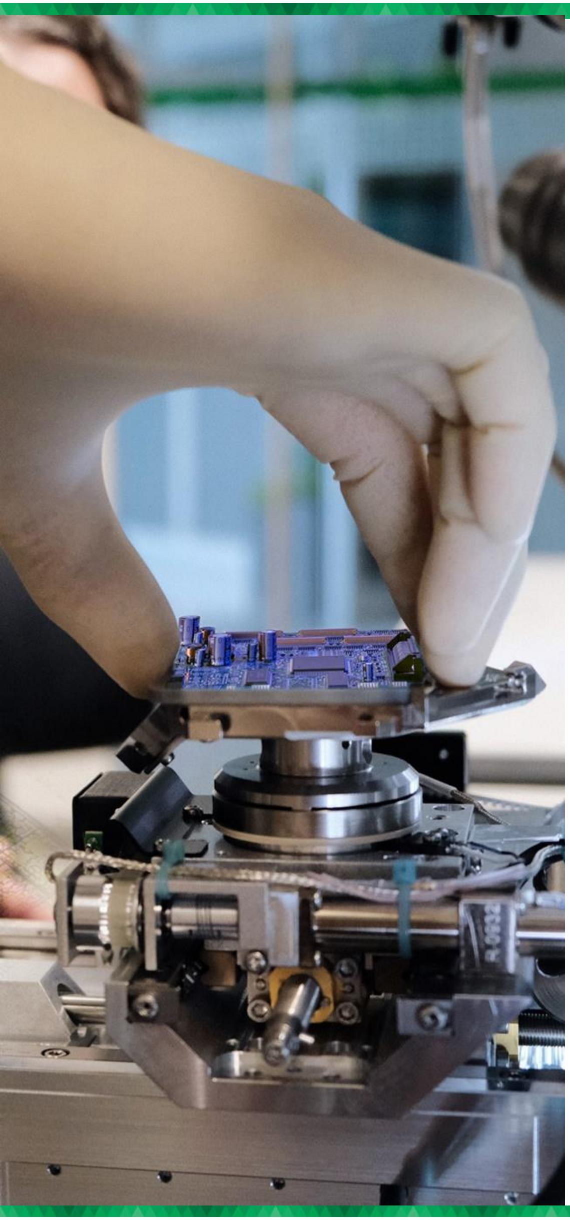
- Effectively navigating industry downturn
- Expanded R&D investment continues for next generation applications
- Significant progress on wafer level assembly adoption

Development

- Gross R&D spending increased 18.8% vs. Q1-22
- 3 hybrid bonding orders received in Q1-23
- Follow on orders anticipated in Q2-23
- Yields on hybrid bonding systems improving
- First TCB chip to wafer order received from US customer

Operations

- Singapore cleanroom to be completed Q3-23
- Vietnam tooling support facility to be completed Q4-23
- Temporary Asian HC added for Q2 revenue ramp



III. OUTLOOK

Guidance Q2-23 & H1-23

€ in millions

Q2-23

	Revenue		Gross Margin		Total Operating Expenses	
	€ 133.4	+15% - +25%	64.2%	62%-64%	€ 44.0	Flat - -5%
	Q1-23	Q2-23	Q1-23	Q2-23	Q1-23	Q2-23

HY1-23

	Revenue		Gross Margin		Total Operating Expenses	
	€ 416.4	-30%	60.5%	~63.5%	€ 77.9	+12%
	HY1-22	HY1-23*	HY1-22	HY1-23*	HY1-23	HY1-23*

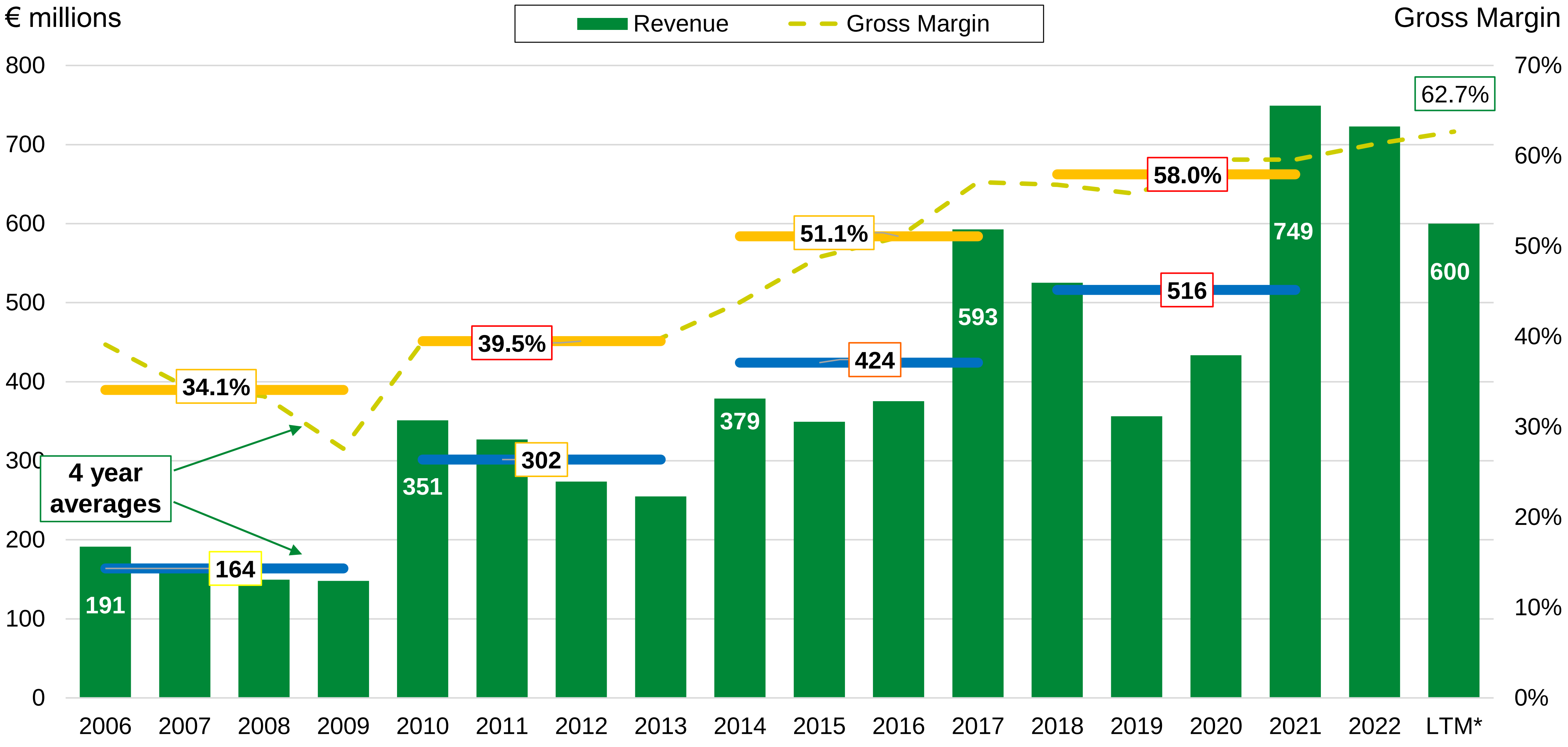
* At midpoint of Q2-23 guidance

Financial Calendar

3-May-23	Goldman Sachs Small and Mid Cap Symposium (virtual)
9-May-23	Roadshow Paris, organized by KBC Securities
16-May-23	J.P. Morgan European TMT conference, London
24-May-23	ABN AMRO Benelux conference, Amsterdam
6-Jun-23	Besi Capital Markets Day, Radfeld, Austria
21-Jun-23	Bank of America C-Suite TMT conference, London
22-Jun-23	ABN AMRO/ODDO BHF conference, London
6-Sep-23	Deutsche Bank TMT conference, London

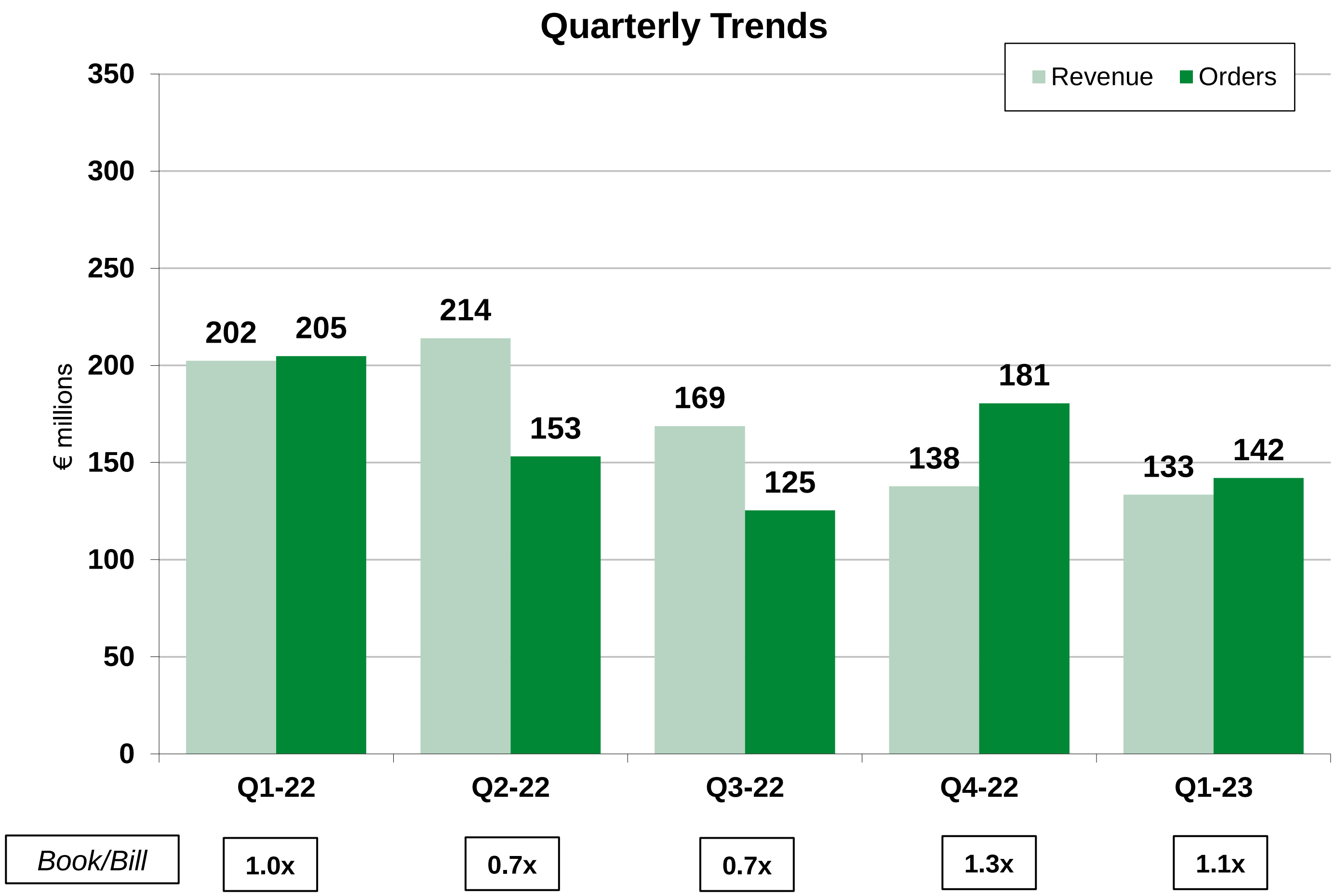
IV. FINANCIAL APPENDIX

Through Cycle Revenue and Gross Margin Trends



* LTM including midpoint of guidance for Q2-23.

Revenue/Order Trends



Q1-23 vs. Q4-22

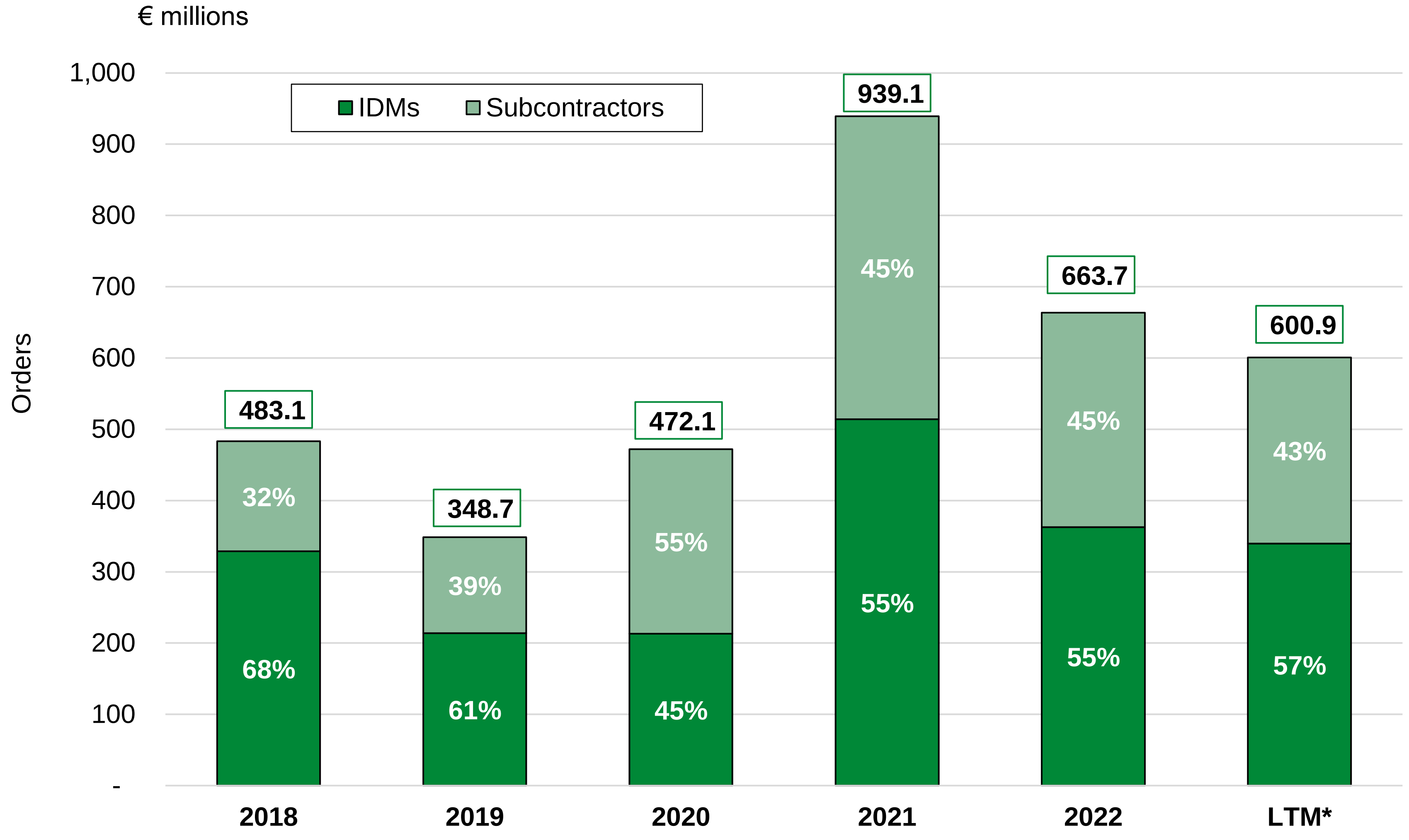
- **Revenue: -€ 4.3 million (-3.1%)**
  - -Lower computing and automotive IDMs and Asian subcons
  - Partial offset: +Increased shipments high-end smartphones

- **Orders: -€ 38.5 million (-21.3%)**
  - -Lower high-end smartphone demand due to pull forward of orders in Q4-22
  - -Lower bookings for mainstream computing and hybrid bonding applications

Q1-23 vs. Q1-22

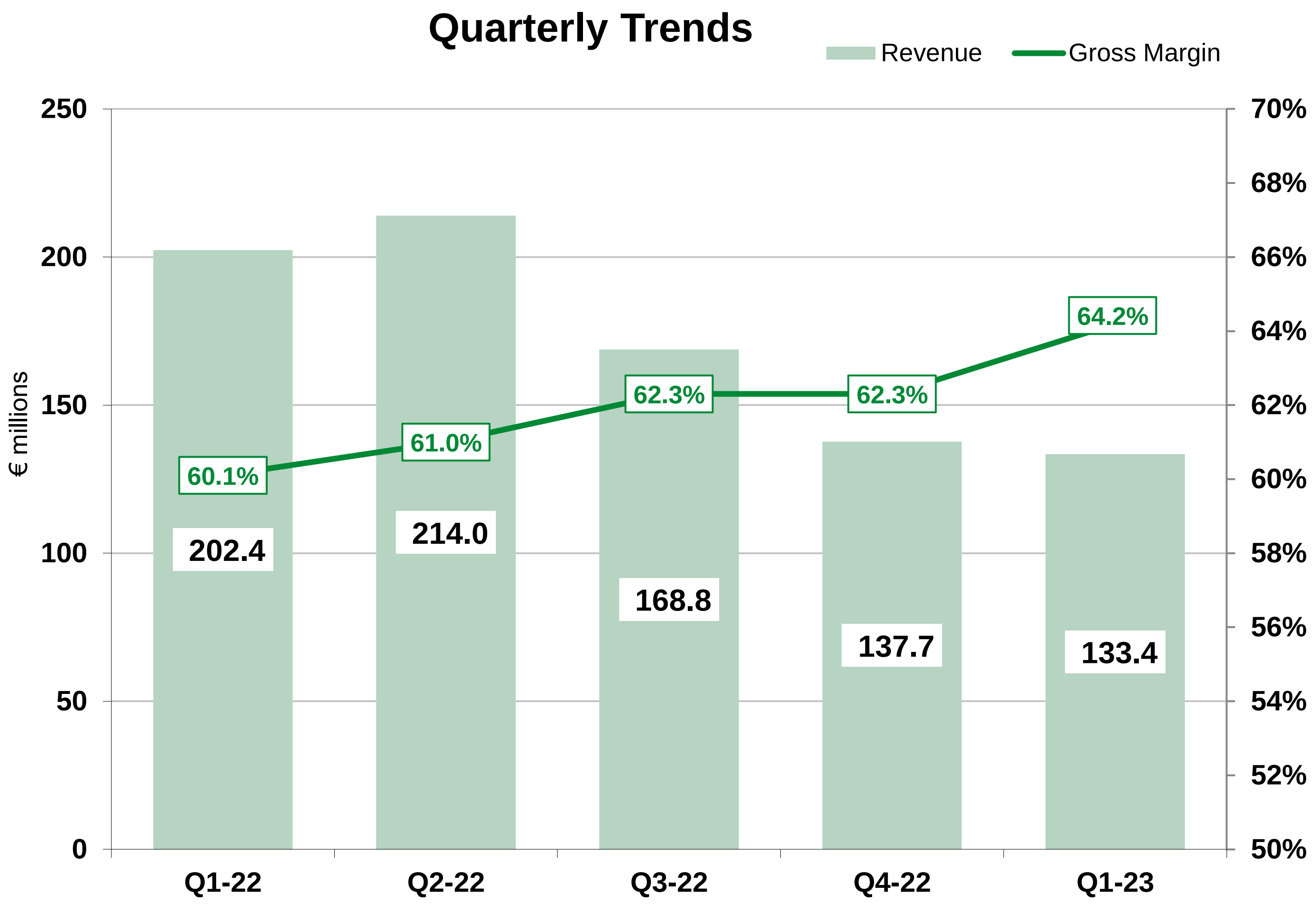
- **Revenue: -€ 69.0 million (-34.1%)**
- **Orders: -€ 62.8 million (-30.7%)**
  - Lower bookings for high end and mainstream computing applications

IDM/Subcontractor Order Trends



* Last twelve month ended March 31, 2023

Gross Margin Trends



<u>Q1-23 vs. Q4-22</u>

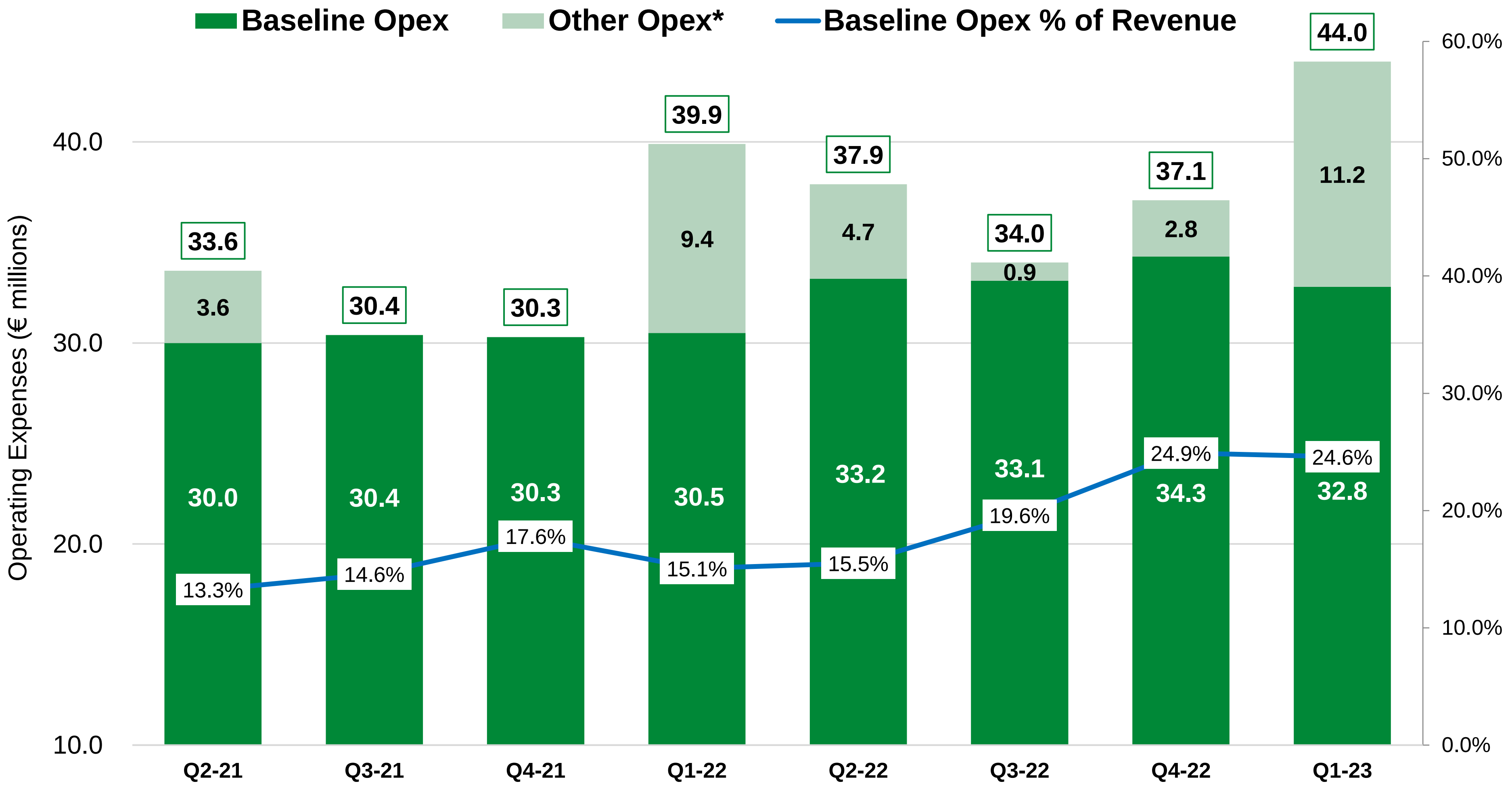
- **64.2% vs. 62.3% (1.9 points)**
  - Above prior guidance
  - Favorable product mix
  - Net forex positive: Revenue +USD vs. EUR
    Costs -MYR/RMB vs. EUR
  - Cost reduction initiatives

<u>Q1-23 vs. Q1-22</u>

- **64.2 vs. 60.1%* (+4.1 points)**
  - Net forex positive: Revenue +USD vs. EUR
    Costs -RMB/MYR vs. EUR
  - Favorable product mix

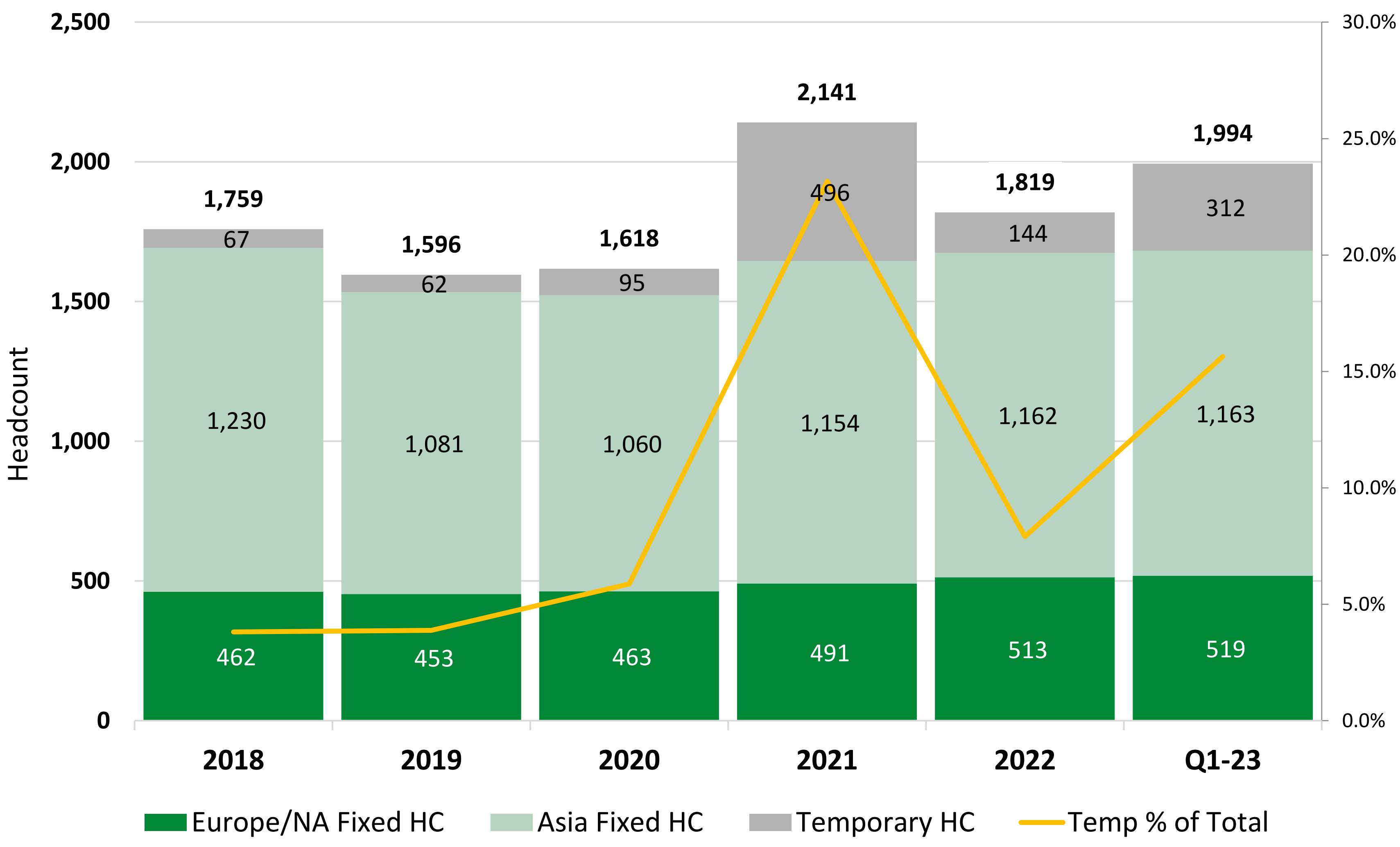
* Favorable impact
Unfavorable impact

Baseline Operating Expense Trends



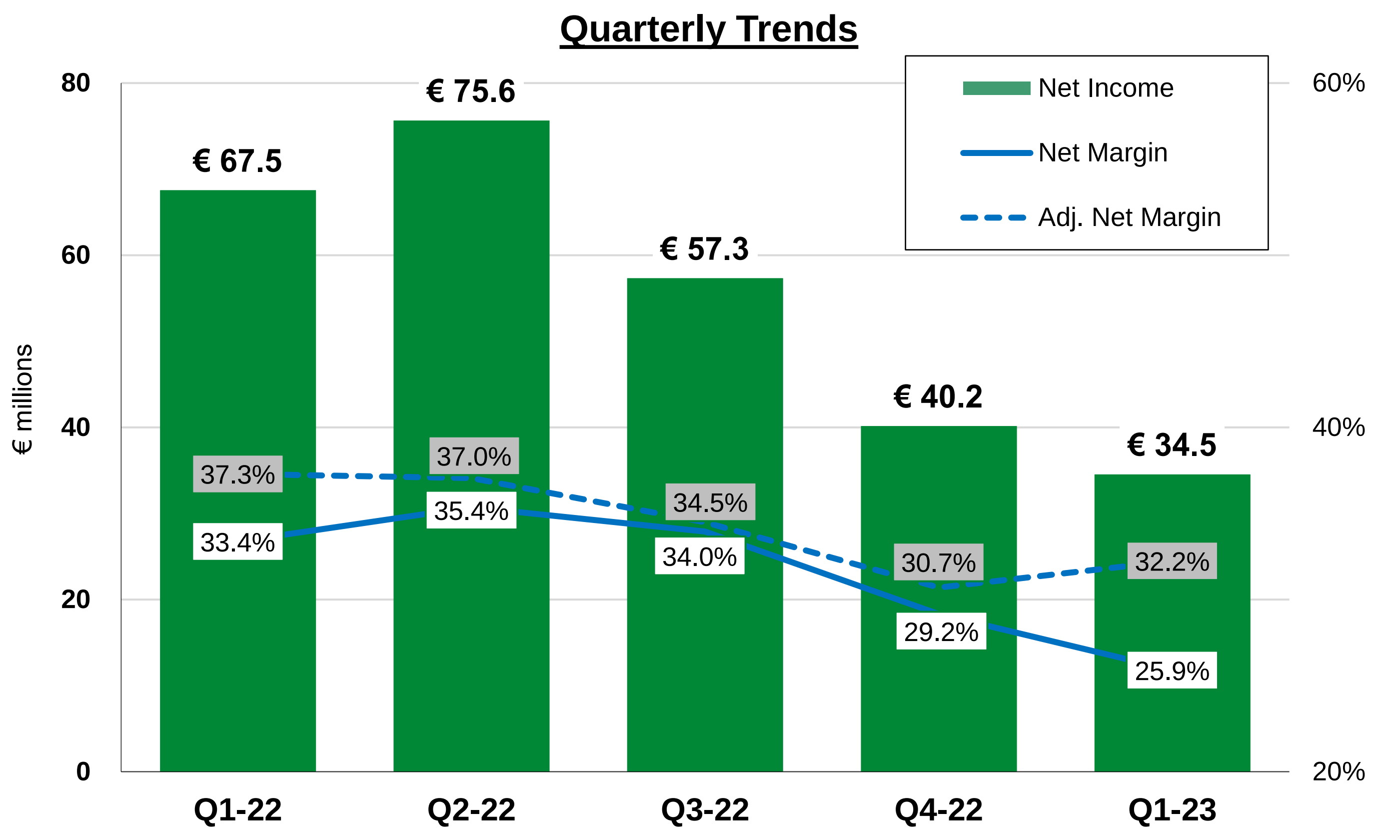
* Other Opex includes both short-term and long-term incentive compensation, restructuring costs, net R&D capitalization/amortization and certain one-time items.

Headcount Trends



- Temporary HC increased in Q1-23 to support Q2-23 revenue growth
- Increasing European fixed HC to support wafer level assembly expansion

Net Income Trends



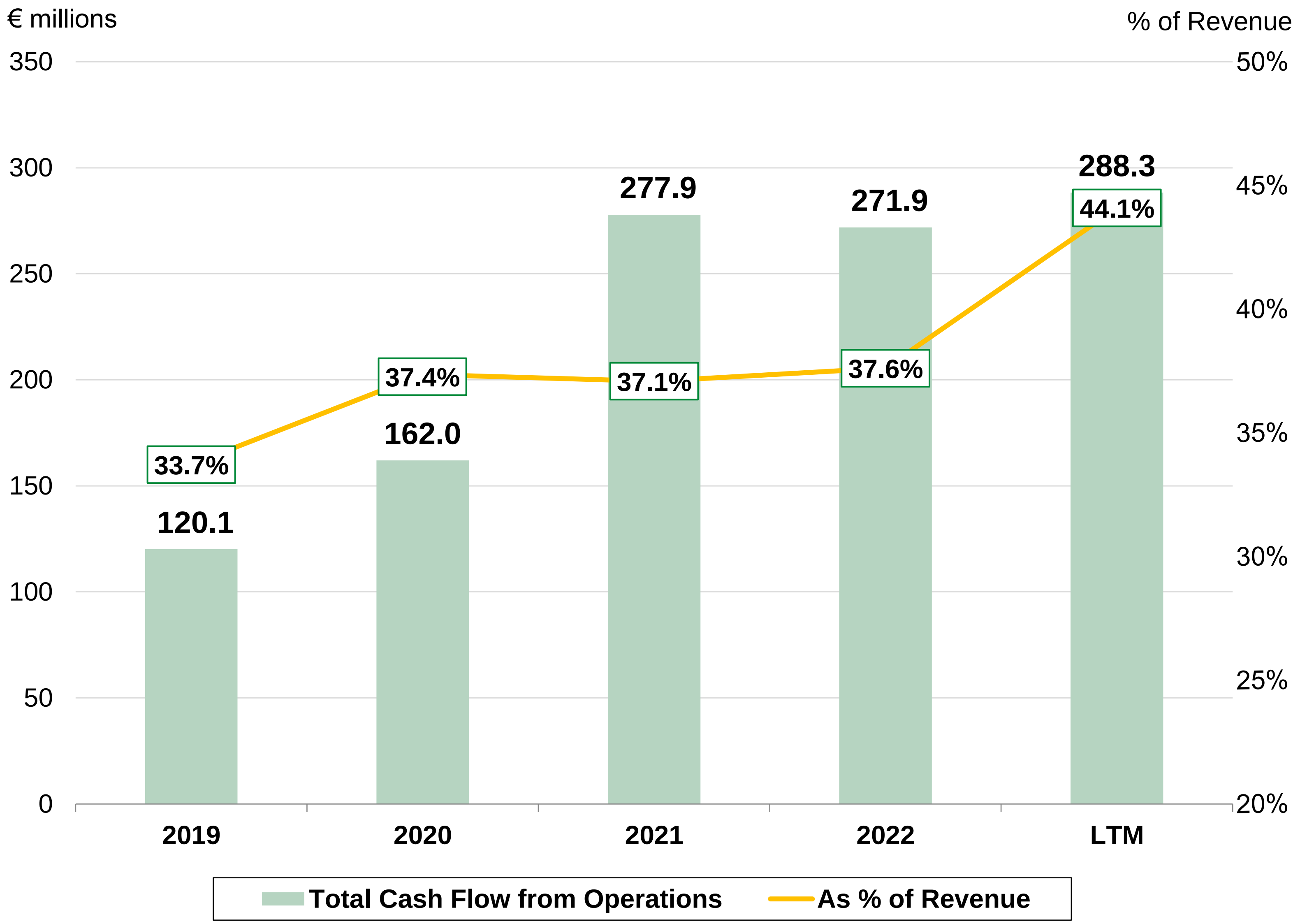
€ 75.5	**€ 79.3**	**€ 58.2**	**€ 42.3**	**€ 43.0**	**Adj. Net Income***
37.3%	*37.0%*	*34.5%*	*30.7%*	*32.2%*	*Adj. Net margin**

* Adjusted to exclude share-based compensation expense in each of the respective periods.

Q1-23 vs. Q4-22
- **€ 34.5 million (-€ 5.7 million)**
  - -€ 7.2 million increase share-based compensation
  - Partial offset:
    - +1.9 point gross margin increase
    - Lower net financial expense
  - Adjusted net income of € 43.0 million vs. € 42.3 million
  - Adjusted net margin 32.2% vs. 30.7%

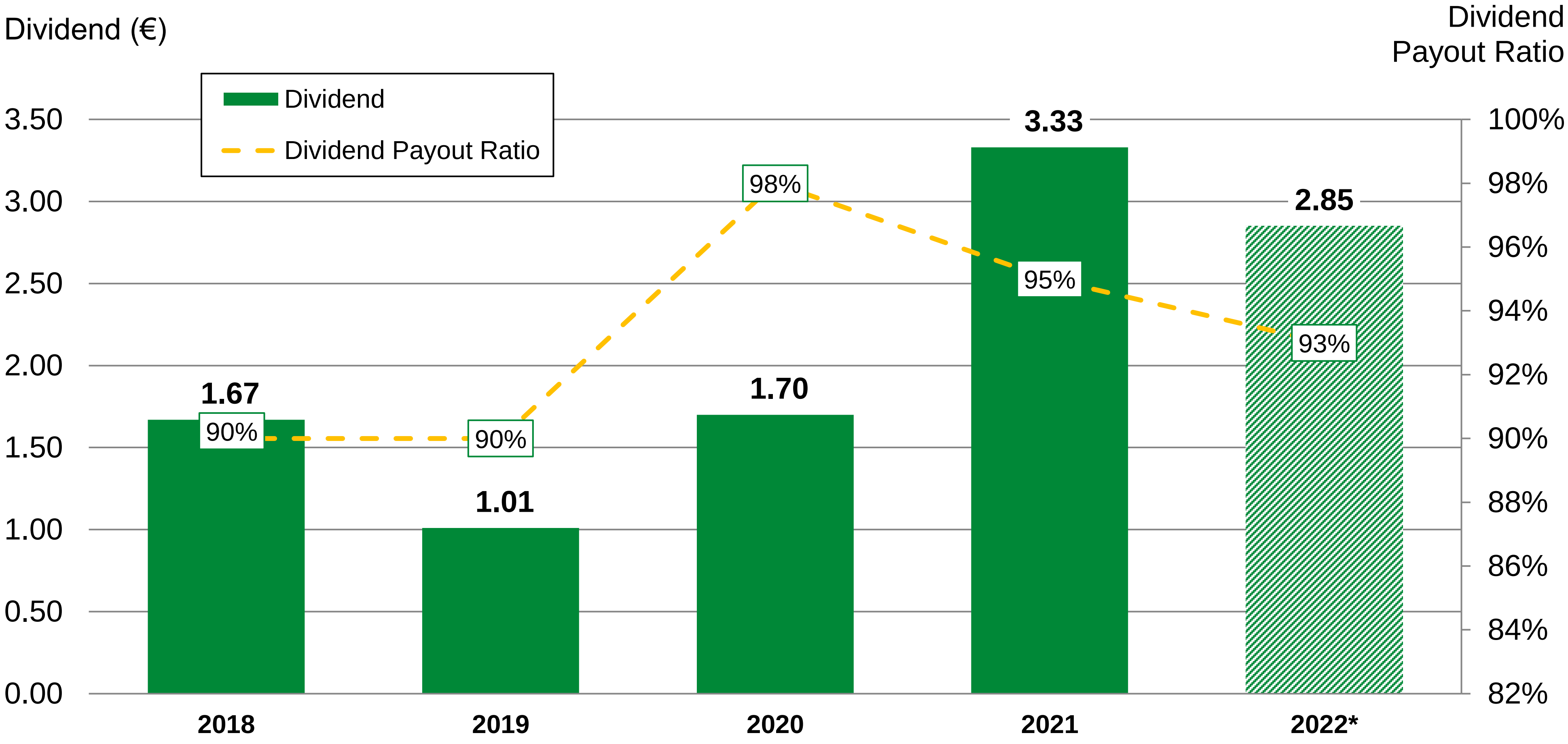
Q1-23 vs. Q1-22
- **-€ 33.0 million**
  - -34.1% lower revenue
  - -18.8% higher R&D spending
  - Partial offset:
    - 4.1 point gross margin increase
    - Lower net financial expense

Cash Flow Efficiency Trends



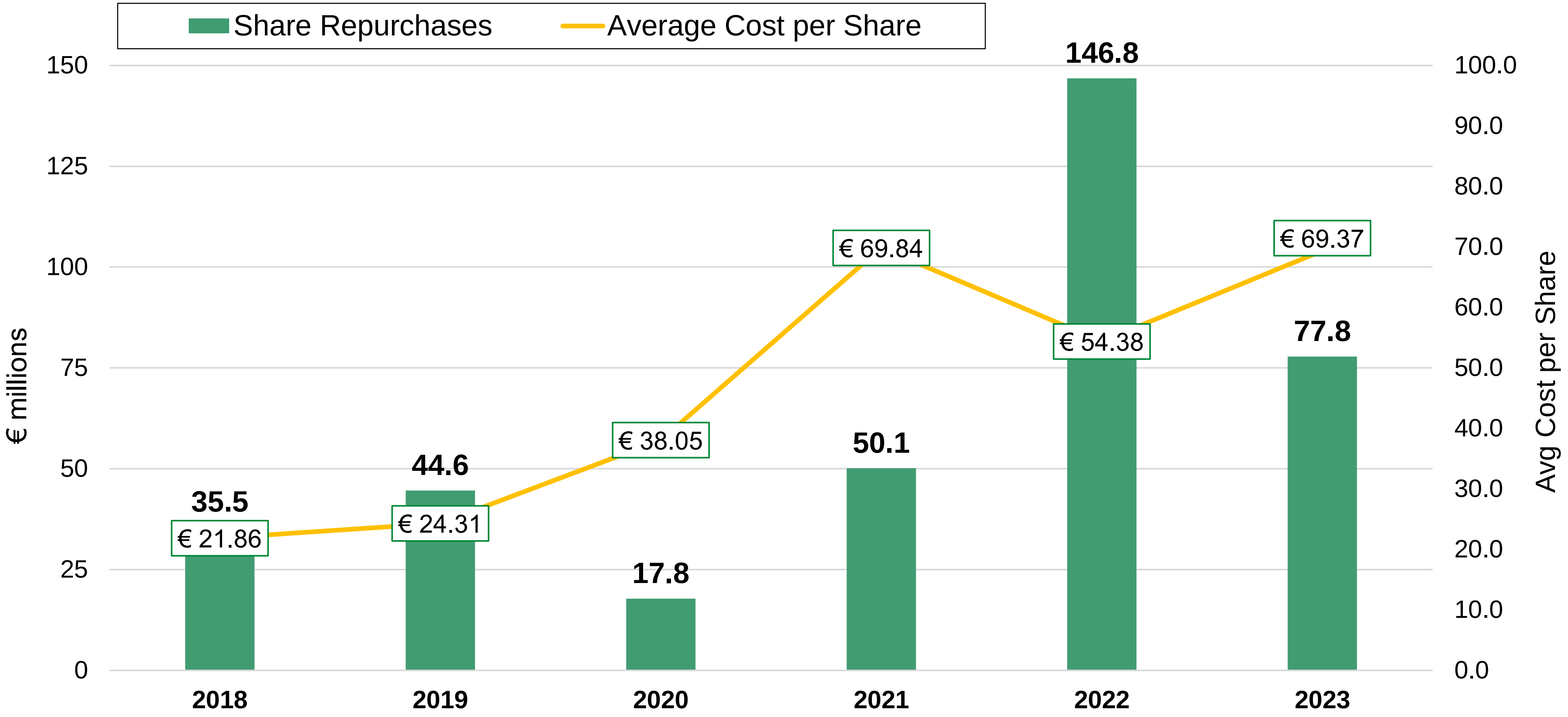
Dividend Trends

Cumulative dividends of € 1.2 billion since 2011, or € 15.63 per share*



* Includes dividend payable from May 4, 2023

Share Repurchase Activity



- Approximately 3.6 million treasury shares at March 31, 2023, representing 4.4% of shares outstanding
- 77.5 million shares outstanding at March 31, 2023, net of treasury

Investment Considerations

Assembly market ever more critical in semiconductor value chain

Disciplined strategic focus has created an industry leader

Long term secular trends drive advanced packaging growth

Wafer level assembly new growth opportunity

Market presence has grown via key IDMs, supply chains and partners

Tech leadership and scalability result in superior financial returns

Commitment to sustainable growth and fighting climate change

Attractive capital allocation policy