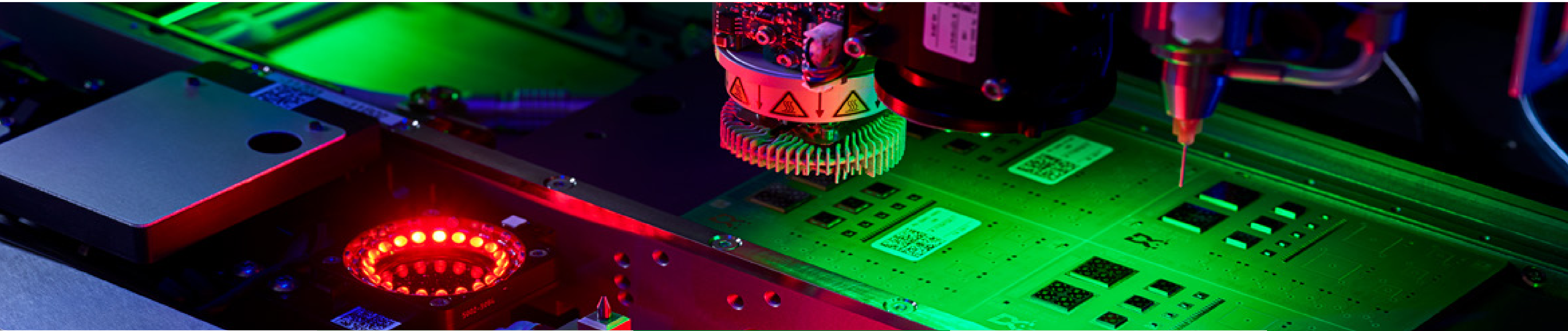
Annual Report 2023

Besi



MISSION STATEMENT

Besi's mission is to become the world's leading supplier of semiconductor assembly equipment for advanced packaging applications and to exceed industry average benchmarks of financial performance.

We also strive to create long-term sustainable value for stakeholders and operate our business in a responsible way, respecting both the environment and society.

CORE VALUES

Our core values are the essence of our corporate attitude and provide us guidance in decision making:

- Respect: We value the richness and diversity of cultures within our organization. We promote an open culture in which we respect each other's opinion, feel free to discuss our concerns and give and receive feedback. We respect the promises made to each other, to our business partners and to our customers.
- Unity: Performing in unity gives us a competitive advantage. We optimally utilize the synergy of our collaborative activities when we work together and share knowledge.
- Customer focused: We provide innovative and relevant product solutions and services to the marketplace that meet our customers' needs and exceed their expectations.

INVESTMENT CONSIDERATIONS

- Assembly market ever more critical in semiconductor value chain.
- Long-term secular trends favor advanced packaging growth.
- Disciplined strategic focus has created an assembly industry leader.
- Market presence has grown via key IDMs, supply chains and partners.
- Wafer level assembly promising new growth opportunity.
- Tech leadership and scalability result in significant financial returns.
- Commitment to sustainable growth and fighting climate change.
- Attractive capital allocation policy.

ESG HIGHLIGHTS

- Progress continues versus Besi's 2024 ESG targets.
- Completed 76% of ESG initiatives developed since 2020.
- Energy from renewable sources increased to 71% versus 20% in 2021.
- Scope 1 & 2 emissions intensity declined by 38% versus 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.
- Conducted Double Materiality Assessment for European CSRD reporting in 2025.
- Improved ratings with MSCI, Sustainalytics, ISS ESG and S&P Global.

Besi

Highlights 2023

Finance

Revenue
(€ millions)
578.9
-19.9%
2022: 722.9

Orders
(€ millions)
548.3
-17.4%
2022: 663.7

Gross Margin
(%)
64.9%
+3.6 points
2022: 61.3%

R&D, gross
(€ millions)
63.9
+0.2%
2022: 63.8

Net income
(€ millions)
177.1
-26.4%
2022: 240.6

Net cash
(€ millions)
113.0
-67.4%
2022: 346.5

Environment

Scope 1 & 2 emissions intensity
(tCO_2/revenue)
8.9
+3.7
2022: 5.2

Scope 3 emissions intensity
(tCO_2e/revenue)
17.0
+3.4
2022: 13.6

People

Fixed headcount
1,736
+3.6%
2022: 1,675

Female employees
(% of employees)
17%
2022: 17%

Stock

Year end share price
(€)
136.45
+141.2%
2022: 56.56

Market capitalization
(€ billions)
10.5
+138.6%
2022: 4.4

Capital Allocation

Total distributions
(€ millions)
435.5
+4.6%
2022: 416.3

Proposed 2023 dividend
(€)
2.15
-24.6%
2022: 2.85

Dividend pay-out ratio
94%
2022: 92%

Total shareholder return
149.7%
2022: -20.0%

Return on Average Equity
33.7%
-4.9 points
2022: 38.6%

Contents

PDF/printed version

This document is the PDF/printed version of the 2023 Annual Report of BE Semiconductor Industries N.V. and has been prepared for ease of use. The 2023 Annual Report was made publicly available pursuant to section 5:25c of the Dutch Financial Supervision Act (*"Wet op het financieel toezicht"*), and was filed with Netherlands Authority for the Financial Markets in European single electronic reporting format (the ESEF package). The ESEF package is available on the Company's website at **https://www.besi.com/investor-relations/financial-reports-and-publications/** and includes a human readable XHMTL version of the 2023 Annual Report. In any case of discrepancies between this PDF version and the ESEF package, the latter prevails.

Caution concerning forward-looking statements

This Annual Report 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 this report, 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. While these forward-looking statements represent our judgements 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. Please refer to the section Risk Management for a detailed description of the risk factors affecting Besi's business. We expressly disclaim any obligation to update or alter our forward-looking statements whether as a result of new information, future events or otherwise.

Report of the Board of Management

Company Profile

BE Semiconductor Industries N.V. ("Besi" or the "Company") is engaged in one line of business: the development, manufacturing, marketing, sales and service of semiconductor assembly equipment for the global semiconductor and electronics industries.

Our market

The semiconductor manufacturing process involves two distinct phases: wafer processing, commonly referred to as the front-end and assembly and test, commonly referred to as the back-end. Once the semiconductor chip (also referred to as a "die") has been created in the front-end wafer fabrication process, Besi's assembly equipment is used by customers to produce advanced semiconductor assemblies or "packages" incorporating a number of process steps such as (i) die sorting or "pick and place" of good versus bad dies, (ii) die bonding to leadframes, substrates, wafers and other chips to facilitate an electrical interconnection, (iii) die molding to encapsulate the assembled die and protect it from external contamination, (iv) chemical plating to provide different physical properties at various stages of the assembly process and (v) trimming and forming of leadframe carriers housing chips and/or singulation (cutting) of substrate and wafer level devices prior to placement on a printed circuit board and ultimately, final testing.

FROM PROCESSED WAFER TO ASSEMBLED CHIP

Semiconductor Manufacturing Equipment 2023E: $ 109.0B*		
Front-end: $ 98.0B (90%)	**Assembly: $ 4.1B (4%)**	Test: $ 6.9B (6%)

Assembly Process

Dicing	Die Attach	Wire Bond	Packaging	Plating	
	✓		✓	✓	**Leadframe** Wire Bond
	✓		✓		**Substrate** Wire Bond
	✓		✓		**Substrate** Flip Chip/TCB
	✓		✓		**Wafer Level** Hybrid, EMIB, TCB, Flip Chip, FOWLP

* Source: TechInsights, December 2023

TechInsights, a leading independent industry research firm, estimated that the size of the assembly equipment market was approximately $ 4.1 billion in 2023, or approximately 4% of the total semiconductor manufacturing equipment market. Annual growth rates can fluctuate greatly based on global economic cycles and the capital investment programs of our semiconductor and industrial customers. Besi's product strategy focuses primarily on providing advanced packaging solutions to customers which incorporate leadframe, substrate and wafer level packaging processes in their semiconductor assembly operations. This represents the most technologically challenging and most rapidly growing area of the assembly equipment industry.

Our semiconductor assembly process technologies

Semiconductor assembly involves three primary process technologies depending on the product application required:

Leadframe assembly: the most traditional approach, involves the electrical connection of the chip via a wire bonding process to a metal leadframe. Leadframe technology is most frequently used to assemble semiconductor devices for mass market and consumer electronics applications as well as power devices for automotive and industrial applications.

Substrate assembly: has gained increased market acceptance over the past three decades. It is used most frequently in product applications that require relatively high degrees of miniaturization and chip density such as smartphones, servers, tablets and laptops as well as wireless, automotive and cloud-based internet applications. In a typical substrate assembly, no metal leadframes are utilized and the electrical connection of the chip is made directly either through (i) a wire bonding process to a multi-layer substrate or (ii) the creation of direct connections to the multi-layer substrate via a flip chip die bonding process.

Wafer level assembly: the most advanced assembly technology, involves placing single or multiple dies or chiplets onto high I/O density wafers to form integrated subsystems. In wafer level packaging, the electrical interconnections are facilitated without the need for a leadframe carrier or substrate interposer for assembly applications <10 nanometers and placement accuracy <3 microns. Hybrid bonding represents the most important evolution of die interconnect technology in wafer level assembly. It replaces traditional reflow flip chip bumps with a direct copper-to-copper connection between a chip and a wafer. Versus flip chip assembly, it facilitates significantly higher data transfer speeds and chip density while lowering energy consumption, heat dissipation and cost of ownership. Hybrid bonding also facilitates the development of 3-dimensional ("3D") chip architectures as well as increased performance, features, complexity and functionality in both logic and memory applications. In addition, wafer level assembly can also be achieved through TCB chip to wafer process technology whereby the electrical connection is formed during the bonding process applying heat and pressure processes. These two technologies are compatible and complementary for wafer level die bonding whose applications will vary depending on the size, density, complexity and throughput required as well as the cost of ownership involved in production environments.

Our products and services

Besi is a leading manufacturer of assembly equipment supplying a broad portfolio of advanced packaging solutions to the semiconductor and electronics industries. We offer customers high levels of accuracy, reliability and throughput at a lower cost of ownership in each of leadframe, substrate and wafer level assembly. We define advanced packaging as the assembly of semiconductor devices using advanced interconnect processes including flip chip, SiP, hybrid, TCB and other wafer level technologies as well as all molding technologies related thereto. We estimate that approximately 70% of Besi's system revenue in 2023 was for advanced packaging applications of which 50% were for the most leading edge devices with placement accuracy <7 microns. We also supply after sales service and spares to customers which in 2023 represented approximately 17% of our total revenue and is a less cyclical and growing part of Besi's revenue mix.

Our principal product and service offerings are set forth below:
- **Die attach equipment:** single chip, multi chip, multi module, flip chip, thermal compression bonding ("TCB"), fan out wafer level packaging ("FOWLP"), hybrid and embedded bridge die bonding systems and die sorting systems.
- **Packaging equipment:** conventional, ultra thin and wafer level molding, trim and form and singulation systems.
- **Plating equipment:** tin, copper, precious metal and solar plating systems and related process chemicals.
- **Services/Other:** tooling, conversion kits, spare parts and other services for our installed base of customers.

Our customers

Our customers are primarily leading multinational chip manufacturers, assembly subcontractors and electronics and industrial companies and include Amkor, ASE, Forehope, Foxconn, Huatian, Infineon, InnoLight, Intel, LG Innotek, Micron, Nvidia, NXP, STMicroelectronics, TFME, Texas Instruments and TSMC. Customers are either independent device manufacturers ("IDMs") which purchase our equipment for internal use at their production facilities or subcontractors which purchase our equipment to assemble packages for third parties on a contract basis. Our equipment performs critical functions in our customers' assembly operations and in many cases represents a significant percentage of their installed base of assembly equipment.

Our commitment to sustainability

Our objective is to promote Besi's business and financial interests in a socially responsible manner for the benefit of all stakeholders, employees, partners, the environment and the local communities in which we operate. We are committed to running our operations in accordance with internationally recognized standards and best practices and to promote sustainability with stakeholders including topics such as environmental conservation, climate change, human rights, conflict mineral free supply chains, hazardous materials, anti-corruption practices and corporate transparency. Our Environmental, Social and Governance ("ESG") strategy has three pillars: Environmental Impact, People Wellbeing and Responsible Business. Within these pillars, we have identified 12 material topics of which key priorities include energy use and renewable energy, sustainable design, health and safety and diversity and inclusion. For more information, please refer to our Environmental, Social and Governance Report.

Our global presence

We are a global company with headquarters in Duiven, the Netherlands. We operate eight facilities in Asia and Europe for development and production activities as well as 13 sales and service offices across Europe, Asia and North America. We employed a total staff of 1,736 fixed and 134 temporary personnel at December 31, 2023, of whom approximately 66% were based in Asia and 34% were based in Europe and North America.

CURRENT COMPANY PROFILE

- Development activities in Europe
- Production in Asia
- Sales/service activities in Asia, NA and Europe

Year ended December 31, 2023	Europe/ROW		Asia	
Revenue (€ millions)	€ 156.0	26.9%	€ 422.9	73.1%
Headcount	627	33.5%	1,243	66.5%

Our listings

Besi was incorporated under the laws of the Netherlands in May 1995 and had an initial public offering in December 1995. Our ordinary shares are listed on Euronext Amsterdam (symbol: BESI) and are included in the Euronext AEX Index. Our level 1 ADRs trade on the OTC markets (symbol: BESIY). We also have three issues of Senior Unsecured Convertible Notes outstanding which are listed on the Deutsche Börse's Freiverkehr market (see Shareholder Information).

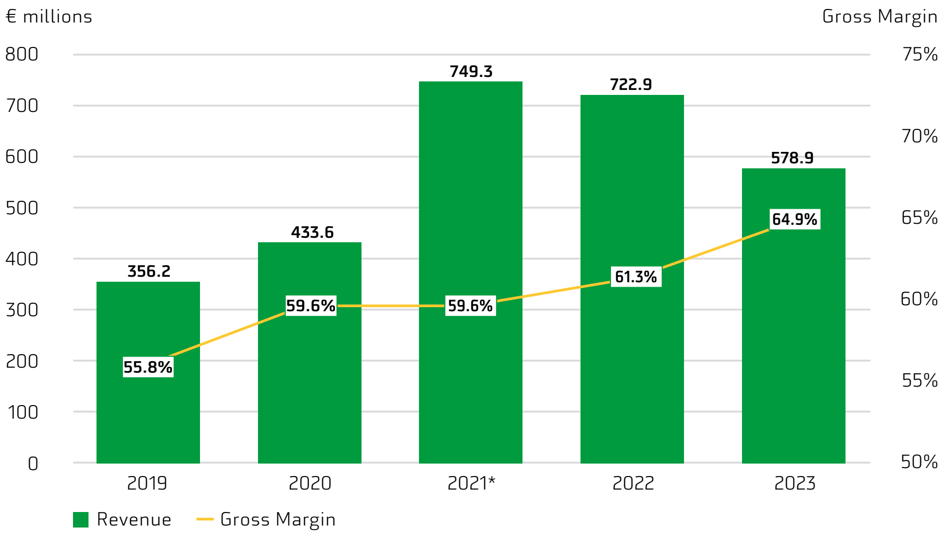
More detailed information about Besi can be found at our website: **www.besi.com**.

Key Highlights

(€ millions, except share and non-financial data)					Year ended December 31,
	2023	2022	2021	2020	2019
Operating data					
Revenue	**578.9**	722.9	749.3	433.6	356.2
Orders	**548.3**	663.7	939.1	472.1	348.7
Operating income	**213.4**	294.1	317.6	149.9	91.9
EBITDA[1]	**239.1**	317.1	335.1	169.0	111.7
R&D expenses, gross[2]	**63.9**	63.8	52.1	41.5	38.4
Net income	**177.1**	240.6	282.4	132.3	81.3
Net income per share (€)					
Basic	**2.28**	3.03	3.70	1.82	1.12
Diluted	**2.23**	2.90	3.39	1.67	1.06
Dividend per share (€)[3]	**2.15**	2.85	3.33	1.70	1.01
Shares outstanding (in thousands)[4]	**77,016**	78,488	77,970	72,866	72,212
Balance sheet data					
Cash, cash equivalents and deposits	**413.5**	671.7	672.2	598.7	408.4
Total debt	**300.5**	325.2	301.8	400.0	278.1
Net cash[5]	**113.0**	346.5	370.4	198.7	130.3
Total equity	**421.4**	628.5	619.3	371.2	298.5
Financial ratios					
Gross profit as % of revenue	**64.9**	61.3	59.6	59.6	55.8
Operating income as % of revenue	**36.9**	40.7	42.4	34.6	25.8
Net income as % of revenue	**30.6**	33.3	37.7	30.5	22.8
Return on average equity (%)[6]	**33.7**	38.6	57.0	39.5	24.2
Headcount data					
Headcount fixed	**1,736**	1,675	1,645	1,523	1,534
Headcount temporary	**134**	144	496	95	62
Total headcount	**1,870**	1,819	2,141	1,618	1,596
Geographic data					
Revenue from Asia as % of total revenue	**73.1**	75.9	77.8	83.3	72.2
Headcount in Asia as % of total headcount	**66.5**	67.2	73.1	67.7	68.3
Environmental, Social and Governance data					
Scope 1 & 2 emissions intensity (tCO_2/€ million revenue)	**8.9**	5.2	14.4	19.8	25.4
Scope 3 emissions intensity (tCO_2e/€ million revenue)	**17.0**	13.6	15.9	16.5	20.8
Renewable energy (% of total energy consumed)	**71**	76	20	20	18
Female employees (% of headcount)	**17**	17	17	17	17

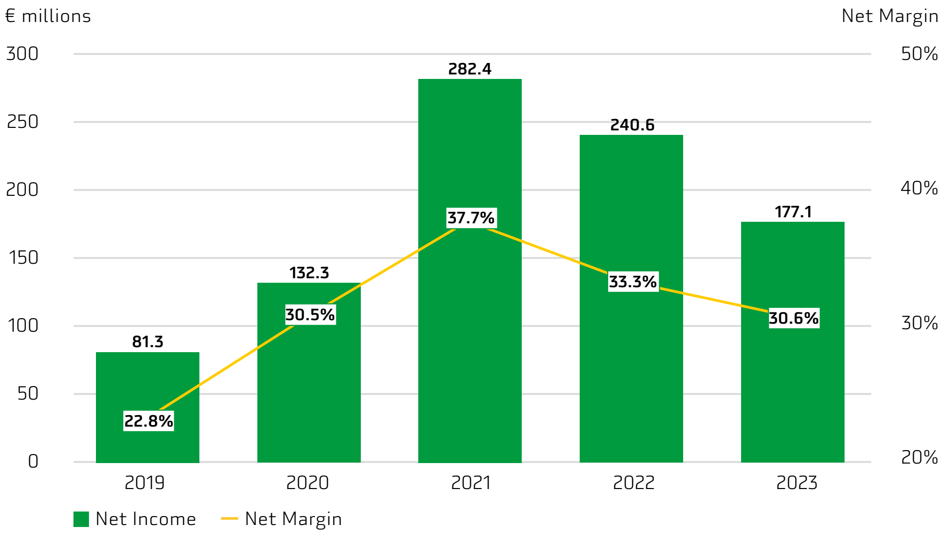
1 EBITDA is defined as operating income (€ 213.4) plus depreciation and amortization (€ 25.7).
2 R&D expenses, gross, is defined as research and development expenses as reported (€ 56.4), adjusted for capitalized development expenses (€ 21.1) and amortization on development expenses (€ 13.6).
3 Proposed 2023 dividend for approval at Besi's AGM to be held on April 25, 2024.
4 Net of shares held in treasury.
5 Net cash is defined as cash, cash equivalents and deposits (€ 413.5) less total debt (€ 300.5).
6 Return on average equity is defined as net income (€ 177.1) divided by the average of the total equity at January 1, 2023 (€ 628.5) and total equity at December 31, 2023 (€ 421.4).

REVENUE AND GROSS MARGIN TRENDS



* Includes € 7.4 million (1.0 point) inventory charge in Q4-21.

NET INCOME TRENDS



Key Highlights 2023

Peer leading financial metrics achieved in challenging market environment

- Revenue, orders and operating profit up 62.5%, 57.2% and 132.2% versus comparable period of last industry downturn.
- Revenue development and profitability significantly exceeded peers.
- New orders received for 3D, 2.5D and silicon photonics applications.
- Production model aligned with changing market conditions:
  - Gross margins rose to 64.9% reflecting Besi's leadership position in advanced packaging.
  - Operating and net margins of 36.9% and 30.6% achieved despite 20% revenue decrease.
  - High return on average equity of 33.7% maintained.

Expanded R&D investment for next generation assembly applications

- R&D, gross, rose to 11.0% of 2023 revenue. Up 66% versus 2019.
- Progress continues to build out Besi's advanced packaging portfolio.
- Hybrid bonding adoption increasing:
  - Installed base rose to 40 units (ex. demo units) and traction in fully integrated production lines is increasing with several systems installed.
  - Number of customers increased to nine.
  - Orders and year end backlog approximately doubled versus 2022.
  - First orders received for HBM applications.
- First TCB chip to wafer system delivered.
- First in-line flip chip system shipped for 2.5D HBM/logic devices.

Strategic initiatives implemented to aid growth in next upcycle

- Strategic Plan 2023-2027 finalized to help achieve business, financial and ESG objectives.
- Singapore cleanroom facility completed for expanded hybrid bonding service/support.
- Technology Advisory Board formed to enhance Besi's advanced packaging strategy and competitive position.
- Establishing Vietnam tooling facility to support customers' geographic expansion outside China.

Well positioned to meet 2024 ESG targets

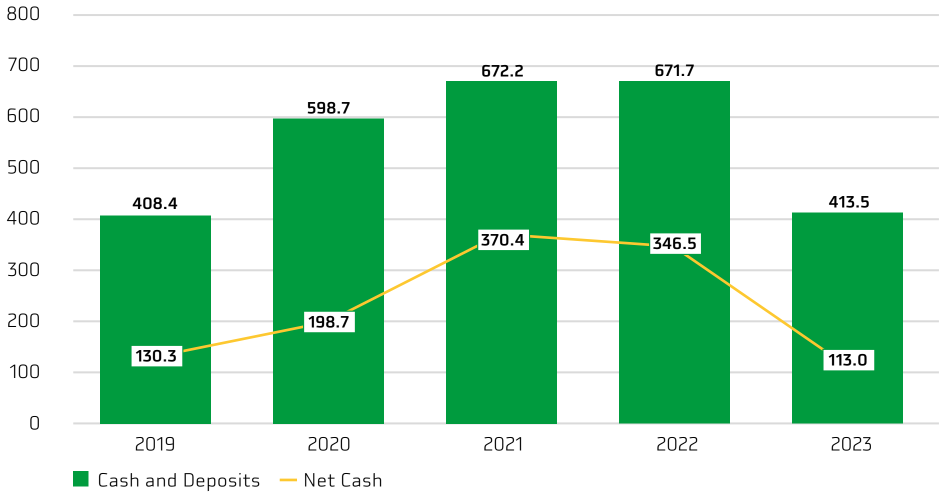
- Completed 76% of ESG initiatives developed since 2020.
- Energy from renewable sources increased to 71% versus 20% in 2021.
- Scope 1 & 2 emissions intensity declined by 38% versus 2021 baseline.
- Set objective of net zero greenhouse gas emissions in operations by 2030.
- Launch of Design-to-X initiative to enhance sustainability and reduce cost.
- Conducted Double Materiality Assessment for European CSRD reporting in 2025.
- Improved ratings with MSCI, Sustainalytics, ISS ESG and S&P Global.

Strong cash flow generation supports capital allocation

- Cash flow from operations of € 208.6 million, equal to 36.0% of revenue.
- Capital allocation increased by 4.6% to € 435.5 million.
- € 300 million share buyback program completed. New € 60 million program initiated.
- € 1.9 billion distributed since 2011. Equal to 30% of cumulative revenue during period.
- Solid liquidity position with cash of € 413.5 million at year end.
- Proposed 2023 dividend of € 2.15 per share. Pay-out ratio of 94%.

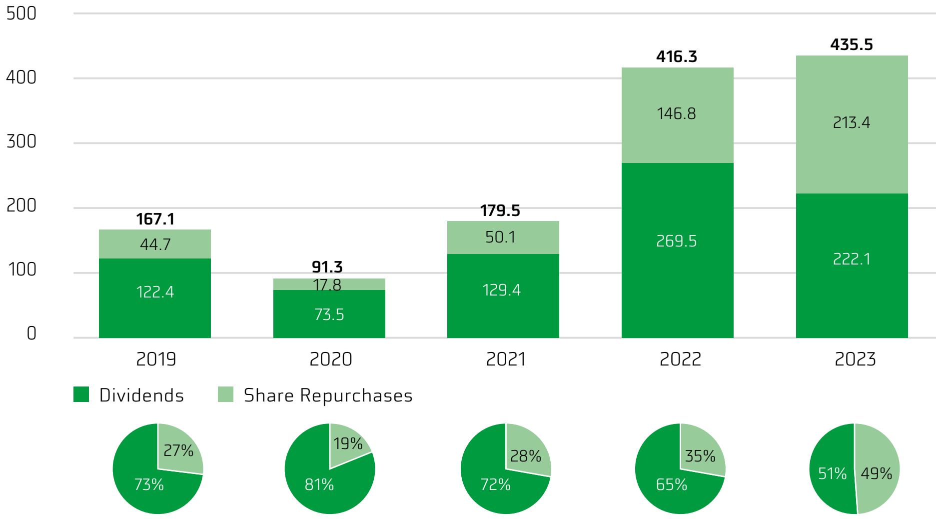
LIQUIDITY TRENDS

€ millions

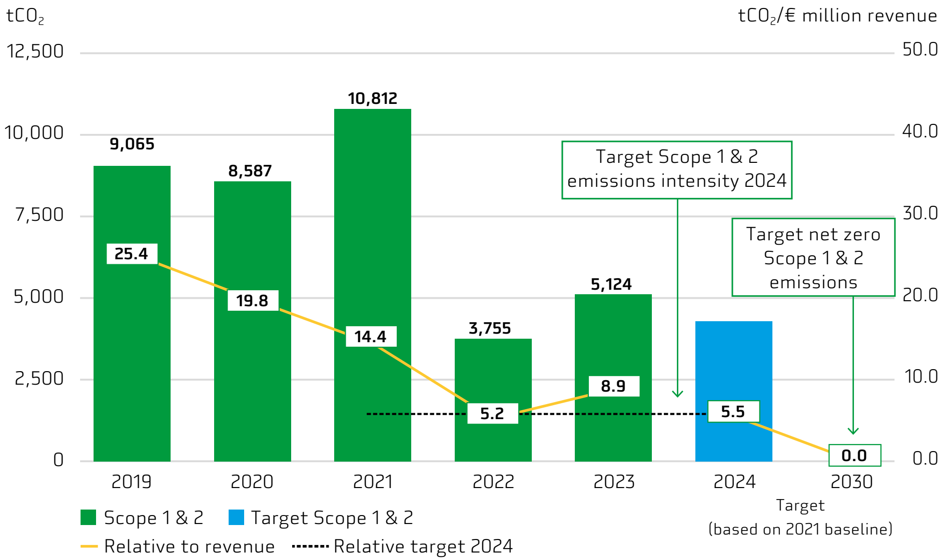


CAPITAL ALLOCATION TRENDS

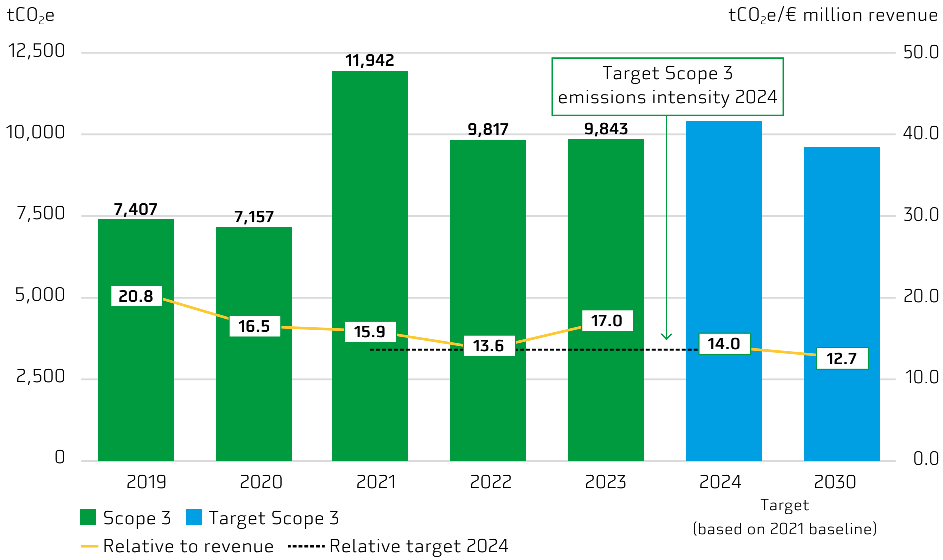
€ millions



SCOPE 1 & 2 EMISSIONS



SCOPE 3 EMISSIONS*



* Besi expanded the categories included in its Scope 3 emissions measurement for 2022. Therefore, Scope 3 emissions data for the years 2019 – 2021 are not fully comparable.

Letter to Stakeholders

Letter to Stakeholders

Dear Stakeholders,

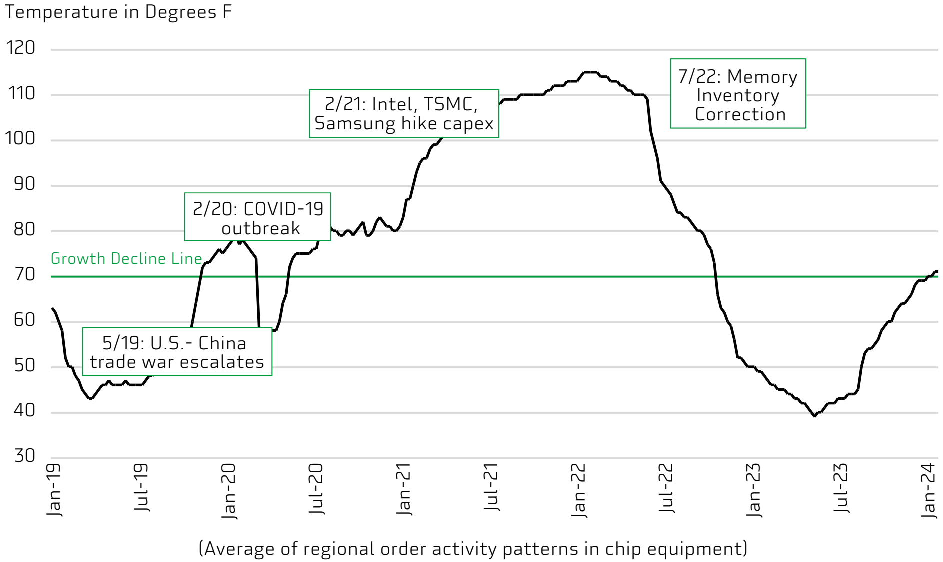
Besi made significant progress this year in building its leadership position in advanced packaging for next generation AI and high-performance computing devices. We focused R&D resources on product innovation in preparation for the next industry upturn and advanced packaging growth anticipated over the next decade. Progress also continued on Besi's hybrid bonding agenda as our installed base increased to 40 systems (ex. demo units) and adoption expanded from three to nine customers encompassing North American, European, Taiwanese and Korean IDMs, foundries and research institutes for logic and memory applications. In addition, Besi responded quickly and effectively to a significant assembly equipment downturn by rapidly aligning production and overhead levels to enhance its market position, increase gross margins and maintain peer leading financial performance. Shareholders responded favorably to our progress and prospects for the next industry cycle, which combined with our financial performance and strong execution of strategic initiatives, resulted in a total shareholder return of 149.7% this year. Further, shareholders were also rewarded for their investment in our Company as we returned € 435.5 million in the form of dividends and share repurchases.

We also continue to formulate and execute strategic initiatives to position Besi for profitable and sustainable growth over the next decade. We expanded our operational footprint in Malaysia, Singapore and Vietnam this year in response to customers re-allocation of certain production outside of China and in anticipation of the growth of hybrid bonding and other advanced packaging technologies. Further, forty-two management members and key customers participated in a four-month, comprehensive strategic review to analyze current strengths and weaknesses and formulate new initiatives for the achievement of business model objectives in the 2023-2027 period. Significant progress also was achieved on our ESG agenda as we made advances in the sustainable design of our platforms, positioned ourselves to meet or exceed challenging targets set for 2024 and launched many new initiatives across the Company to further reduce our environmental footprint. Moreover, we performed a Double Materiality Assessment as a precondition for adherence to CSRD reporting requirements in 2025. Our ESG ratings with the major publicly recognized frameworks such as Sustainalytics, S&P Global, ISS ESG and MSCI also improved materially, underscoring our commitment to excel in this area.

Business 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

MARKET CONDITIONS REACHED A TROUGH IN 2023

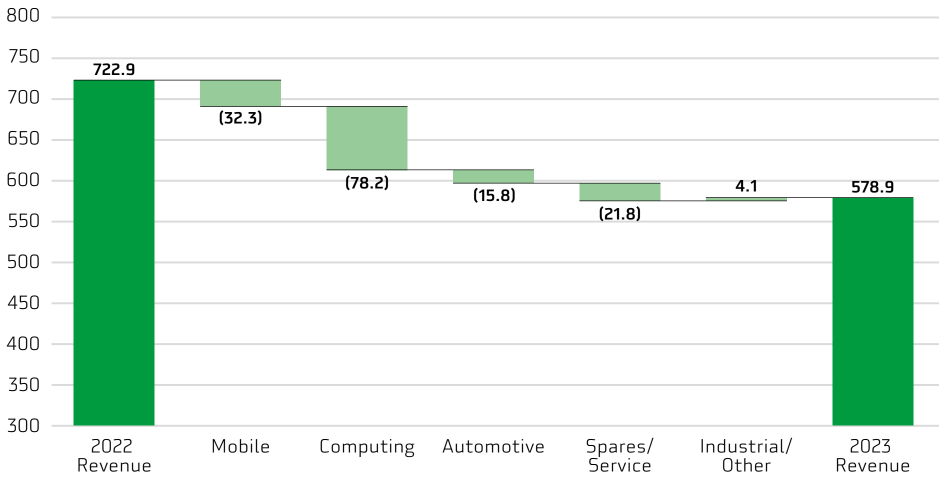
TechInsights global chip making climate trend index



Source: TechInsights, February 2024

For the year, revenue and net income of € 578.9 million and € 177.1 million declined by 19.9% and 26.4%, respectively, versus 2022. Similarly, orders of € 548.3 million declined by 17.4%. Revenue weakness this year was principally due to adverse market conditions in the assembly equipment market which declined by approximately 26% as per Techinsights. It also reflected significantly reduced demand for mainstream computing applications by both IDMs and Asian subcontractors and, to a lesser extent, reduced demand for automotive applications following strong growth over the past two years. In the aggregate, we were pleased with our revenue performance this year relative to our assembly equipment peers as Besi's leadership position in advanced packaging helped mitigate the adverse effects of an industry downturn as severe as the one experienced in the 2017-2019 period. Order weakness in 2023 was primarily due to decreased demand for mainstream consumer electronics and automotive applications partially offset by strong growth in the second half of the year for silicon photonics, hybrid bonding and 2.5D logic/memory applications as customers began to significantly build out their generative AI and high-performance computing capacity. In particular, hybrid bonding orders and year end backlog approximately doubled versus comparable levels of the prior year.

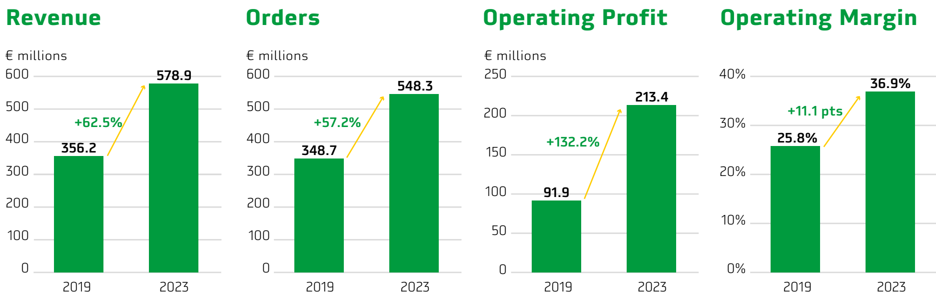
END-USER MARKET TRENDS



Besi achieved peer-leading operating and net margins of 36.9% and 30.6% in 2023 as we successfully aligned our operating model to difficult market realities. In fact, gross margins increased to 64.9% versus 61.3% in 2022 due to successful new product introductions supported by a keen focus on cost control efforts, effective supply chain management and net forex benefits. Elevated operating margins were maintained despite increased development spending to support the expansion of our advanced packaging product portfolio for the next market upcycle.

Moreover, the organization realized a strong performance versus the last industry downturn and versus peers as measured by a comparison of the trough years 2019 and 2023 which followed cyclical peak levels reached in 2017 and 2021. As evident in the following chart, revenue, orders and operating income in 2023 grew by 62.5%, 57.2% and 132.2%, respectively, versus the comparable trough period of the prior cycle (2019). Operating margins also expanded by 11.1 points. Improving through cycle performance underscores Besi's successful new product introductions in the advanced packaging segment as well as the increased profitability of our operations.

PERFORMANCE SIGNIFICANTLY ABOVE LAST INDUSTRY DOWNTURN

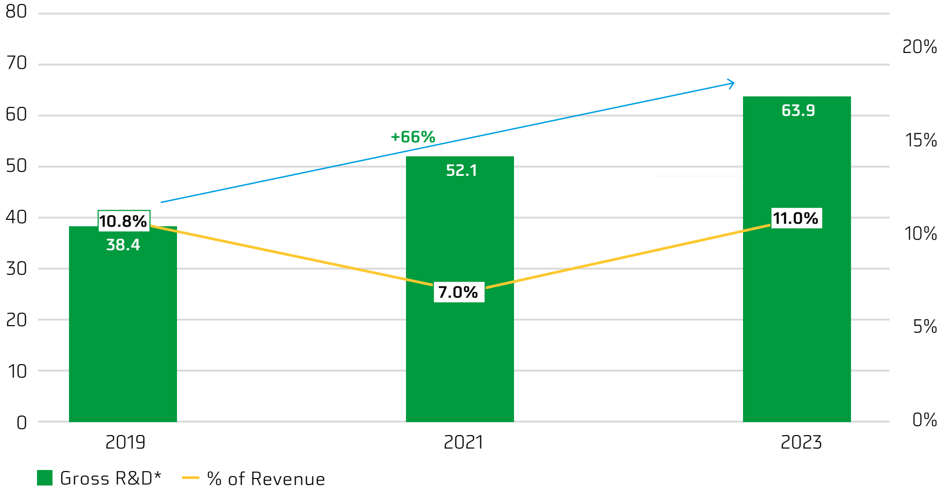


Highly focused R&D activities for next generation applications

Over the past five years, Besi has developed leading edge die attach, packaging and plating systems with a particular emphasis on enhancements to our core technology and expansion of our advanced interconnect capabilities. Development efforts have been highly focused on requirements for (i) increased accuracy, performance, chip density, throughput and complexity, (ii) thinner devices and higher levels of miniaturization, (iii) new 2.5D and 3D heterogeneous device architectures, (iv) lower power consumption and heat dissipation and (v) shorter lead times, all offering a lower overall cost of ownership to customers. We continually re-engineer our existing product platforms to achieve more standardized design and manufacturing processes and have collaborated with leading European universities to optimize the sustainable product design and cost of our systems. In addition, we have incorporated common parts and common platforms for each successive generation of die bonding and packaging systems. This is another way we can enhance their sustainable design and lower production cost by reducing engineering time and materials consumption while reducing lead times for delivery. In addition, we design enhanced versions of each product platform every one to two years to ensure that Besi's systems maintain their technological leadership.

EXPANSION OF R&D SPENDING

€ millions



* Gross R&D spending excludes impact from capitalization/amortization of R&D costs.

We have increased gross R&D spending by 66% since 2019 as we developed a complete wafer level assembly portfolio and enhanced our assembly offerings for 2.5D architectures. In 2023, gross R&D spending reached € 63.9 million, or 11.0% of total revenue. Besi made significant investments this year to (i) develop a next generation 100 nm accuracy hybrid bonding system, (ii) deliver the first TCB chip to wafer system with industry leading placement accuracy and (iii) ship our first in-line flip chip system for the placement of HBM and logic devices in 2.5D architectures at industry leading throughput and flexibility. Increased R&D spending also reflected investment for the completion of a new cleanroom facility in Singapore to better support hybrid bonding adoption by customers.

R&D Highlights
• Spending increased to 11.0% of revenue in 2023
• Complete wafer level assembly portfolio available for commercial production
• TCB chip to wafer system delivered
• New in-line flip chip system introduced for 2.5D HBM/logic applications
• Singapore cleanroom facility completed
• Technology Advisory Board formed

Capital allocation increased. Strong liquidity base to finance future growth

Shareholders were rewarded for their investment in Besi as we increased dividends and share repurchases to € 435.5 million this year, an increase of 4.6% versus 2022. Of note, we completed our € 300 million share repurchase program in October 2023 and launched a new € 60 million program with an anticipated completion by October 2024. As such, the amount of share repurchases increased by 45.4% to € 213.4 million in 2023, or 2.6 million shares. As a result, we ended the year with 77.0 million shares outstanding, which included 4.1 million shares held in treasury (5.1% of shares outstanding). Our objective is to further reduce Besi's shares outstanding to offset dilution resulting from prior Convertible Note issuance. Post our capital allocation to shareholders, Besi ended the year with a liquidity base consisting of cash, cash equivalents and deposits aggregating € 413.5 million and net cash of € 113.0 million. Our significant liquidity base positions us favorably to support Besi's future growth plans.

Capital Allocation Increased
• € 1.9 billion distributed since 2011. Equals 30% of cumulative revenue
• € 300 million share repurchase program completed
• New € 60 million program initiated
• Proposed dividend of € 2.15 for 2023. 94% payout ratio

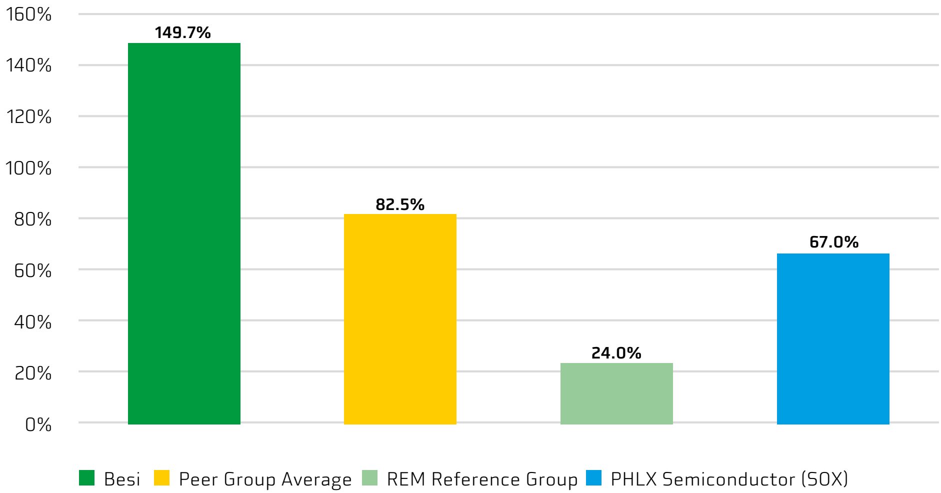
Given profits earned in 2023 and Besi's solid financial position, we will propose a cash dividend of € 2.15 per share for approval at Besi's AGM to be held on April 25, 2024. The proposed distribution is the fourteenth consecutive annual dividend paid.

Long-term share price outperformance

Besi's total shareholder return in 2023 of 149.7% exceeded the 67.0% increase in the Philadelphia Semiconductor (SOX) index and 82.5% increase reported by direct peers. Our total return ranked first among our remuneration reference group of 19 public companies and ranked 1st and 2nd in the AEX and STOXX Europe 600 indices this year, respectively. Over the past three and five years, an investment in Besi's shares has produced a cumulative total return of 210.3% and 812.5%, respectively, significantly outpacing returns of the SOX index, our remuneration reference group and direct peers. In addition, interest in our stock grew significantly with both research analysts and institutional investors. Currently, 21 research analysts cover Besi's shares. Trading in our shares was also enhanced by a 27% increase in our average daily liquidity versus 2022.

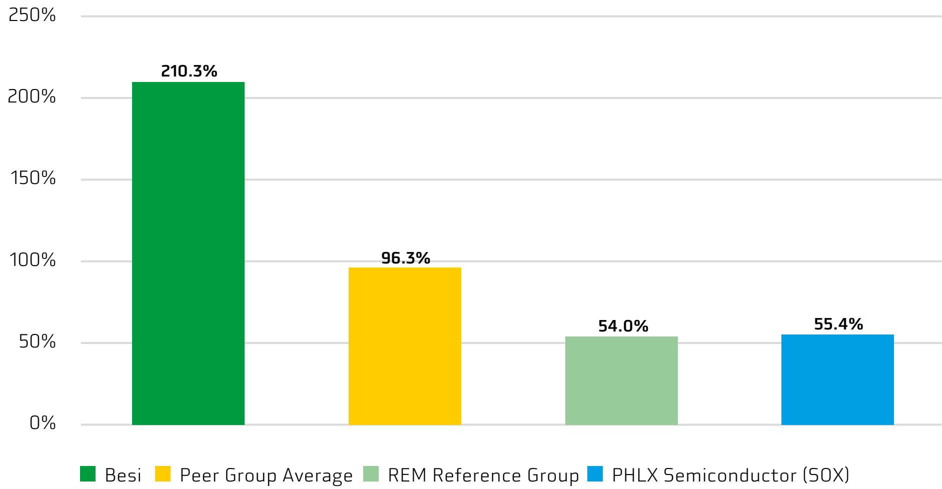
TOTAL RETURN OUTPERFORMANCE VERSUS PEERS

2023 Total Shareholder Return
Besi versus Peers, REM Reference Group and SOX Index



- Total Shareholder Return includes reinvestment of dividends.
- Besi returns calculated in euro. Philadelphia SOX returns calculated in US dollar.
- Peer group average consists of Kulicke & Soffa, ASM PT, and Disco Corp.

3 Year Cumulative Shareholder Return
Besi versus Peers, REM Reference Group and SOX Index



Source: Refinitiv Data Stream

Long-term sustainable value creation continues

Over the past decade, Besi has delivered strong growth and value creation for all stakeholders while conducting its business in a responsible and sustainable manner. Besi's dedicated focus on advanced packaging, technological leadership and the disciplined execution of strategic initiatives, such as organize Besi for € 1 billion+++ revenue model, partner with the Winners 2.0, expand leading hybrid bonding position and other initiatives as described in the Strategy section, has created a leader in the assembly equipment market with superior through-cycle performance and strong financial metrics. Since 2011, we have returned approximately € 1.9 billion to shareholders in the form of dividends and share repurchases (including the dividend proposed for 2023) representing approximately 30% of Besi's cumulative revenue. In addition, our share price increased by 5,230% and our market capitalization grew from € 188 million to over € 10 billion at year end. The profitability of our business has also increased significantly with gross margins increasing from 40% to 65%, net income growing more than five-fold and return on average equity increasing from 11.2% to 33.7%.

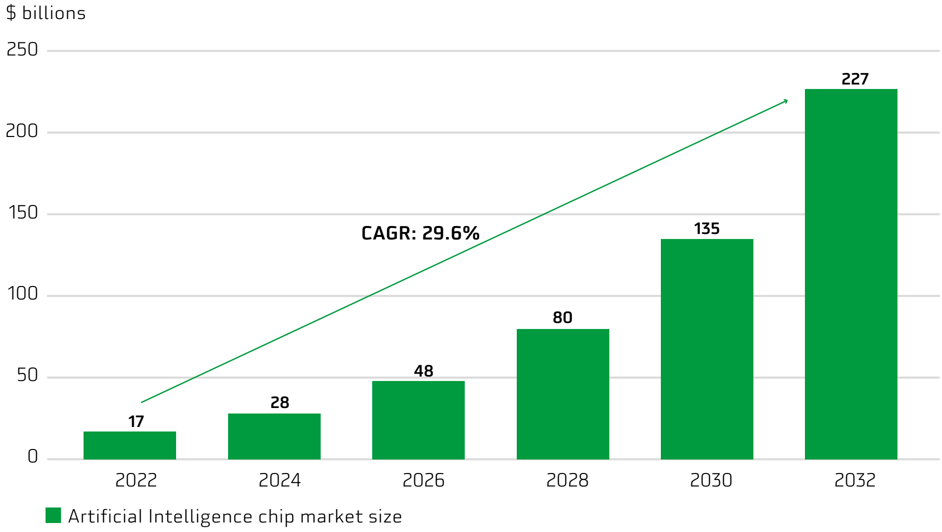
Besi's advanced packaging systems critical for next generation AI devices

We believe that we are in the early stages of a transition to an AI enabled digital society accompanied by a new generation of sustainable and more environmentally friendly electronics applications. In such a society, intelligence and electronic content will increase in all facets of our life including medical care, homes, factories, municipalities and transportation. We see evidence daily of new productivity enhancing technologies such as cloud computing, advanced 5G networks, Chat GPT, Gemini, Microsoft 365 Co-Pilot and other artificial intelligence software, data mining and predictive analysis, autonomous driving, robotics and blockchain software. In response, new leading edge semiconductor devices are being developed which will play a critical role in furthering the use of many such applications. In fact, the adoption of generative AI is estimated by analysts to have a faster adoption rate in our society than any other 21st century technology, including the smartphone.

Consistent with these trends, a new technology cycle is underway wherein customers increasingly demand more complex advanced packaging solutions containing ever more functionality in ever smaller form factors requiring also sub-micron die placement accuracy. Advanced packaging is now recognized by customers as a critical part of the semiconductor value chain and a gating item to produce next generation devices. We are well positioned with advanced packaging revenue representing approximately 70% of Besi's total system revenue and revenue from the most leading edge applications with <7 micron die placement accuracy representing approximately 50% of total system revenue.

One of the most powerful forces driving growth in Besi's addressable market today is the rapid adoption of artificial intelligence and virtual and augmented reality in our daily business and personal interactions. End-user customers are highly focused on incorporating generative AI software capabilities in data centers, personal computers, tablets, smartphones and industrial manufacturing, to name just a few applications. In addition, we see increased usage of photonics, particularly in pluggable optical transceivers that are used within high-performance AI servers and data centers to further extend performance and reduce power consumption. As seen in the chart below, some analysts expect that the artificial intelligence chip market could grow more than tenfold over the next decade with a compound annual growth rate of 30%.

AI CHIP REVENUE COULD REACH $ 227 BILLION BY 2032

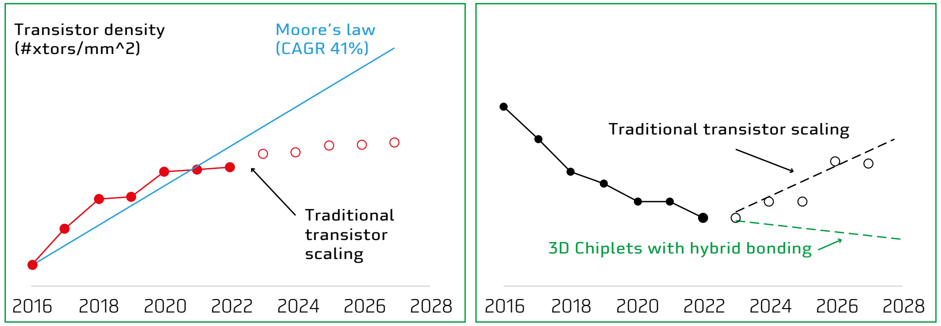


Source: Precedence Research

The powerful drivers for high-performance computing growth over the next decade will require new technologies to extend Moore's law on a cost-efficient basis via new logic and memory devices incorporating 2.5D/3D chiplet architectures. As shown in the chart below, as Moore's Law scales more slowly approaching 2 nm node sizes, the cost per transistor increases more rapidly resulting in escalating wafer fab costs for producers. Currently, the only means of extending Moore's law on a cost-efficient basis is the adoption of 2.5D and 3D device structures utilizing new advanced packaging solutions.

NEW WAFER LEVEL ASSEMBLY TECHNOLOGIES EXTEND MOORE'S LAW

Moore's law scaling is slowing | **Cost per transistor is increasing**



Source: Qualcomm and Besi

At present, semiconductor producers have made investments in new logic devices in data center and supercomputer applications utilizing hybrid bonding, TCB chip to wafer, advanced flip chip and multi module die bonding assembly processes. The significant increase in the power, performance, functionality and speed of logic devices has also required new memory solutions such as high bandwidth memory ("HBM") in vertical 3D stacks of chips and chiplets to match such performance improvements. The current generation of HBM3 and future HBM4 and HBM5 architectures in development are also expected to drive substantial growth in advanced packaging requirements over the next decade. Besi's product strategy has focused on providing the industry the most advanced portfolio of advanced packaging solutions for the upcoming AI era.

BESI'S ADVANCED PACKAGING SYSTEMS AVAILABLE 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 tablets, 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

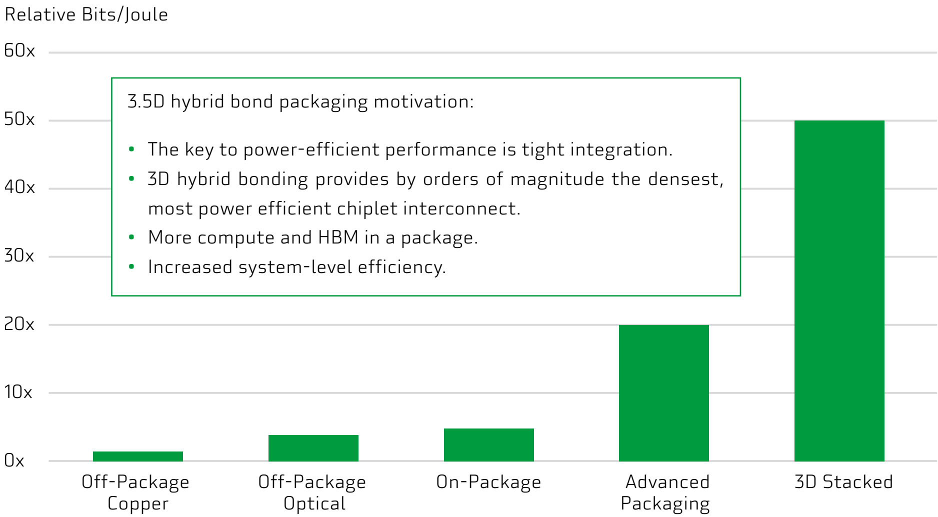
Besi Solutions

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

Progress achieved in expanding hybrid bonding adoption globally

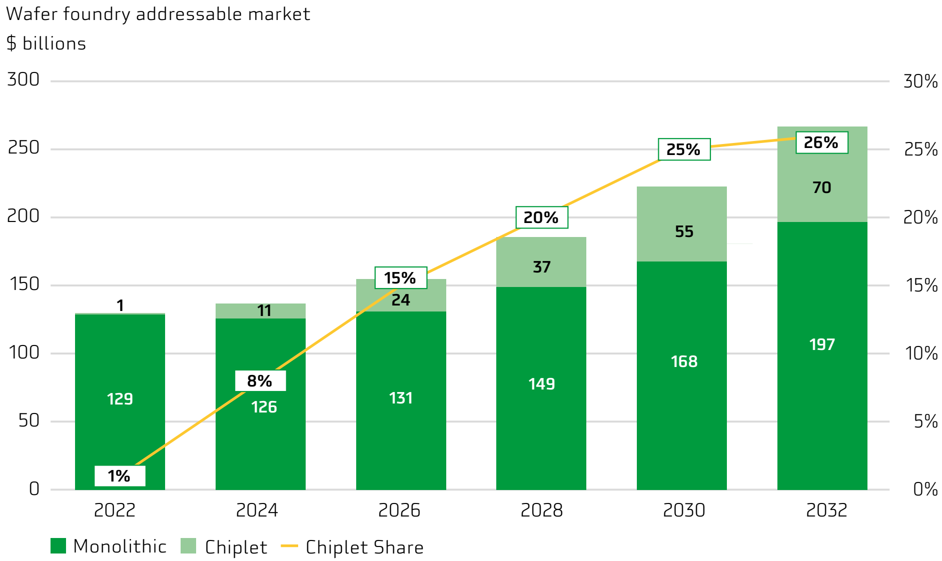
Hybrid bonding is one of the most important leading edge process technologies for the assembly of generative AI devices as it permits the connection of multiple, heterogeneous chiplets in die form using direct copper interconnects. Chiplet adoption has been increasing rapidly in recent years as one of the primary methods to increase the power, performance, functionality and density of new chip architectures in AI and high-performance computing applications for Besi's principal end-user markets.

HYBRID BONDING INCREASES POWER-EFFICIENT CHIP PERFORMANCE



Source: AMD

CHIPLET ADOPTION INCREASING



Source: CSM foundry model, ISM foundry model

Hybrid bonding has the potential to become the leading assembly solution for device geometries <7 nanometers over the next decade. Its mainstream acceptance is anticipated to occur over the next five years. It is anticipated that hybrid bonding adoption should help drive growth for the assembly equipment market and Besi's addressable market at rates higher than those experienced over the past two decades given its importance in extending Moore's law. Its utilization will also expand demand for Besi's other leading edge assembly technologies, further increasing the potential growth of our addressable market. We aim to significantly expand both Besi's revenue potential and market share over the next decade given our leadership position, technology roadmap and collaboration with Applied Materials.

Substantial progress was achieved this year to advance our hybrid bonding agenda. Continued improvements in placement accuracy, throughput, yield and lead times for delivery all contributed to its more widespread adoption. At year end, our installed base increased to 40 systems (ex. demo units), and traction in fully integrated production lines is increasing with several systems installed. As such, adoption increased from three to nine customers encompassing American, European, Taiwanese and Korean IDMs, foundries and research institutes for logic and memory applications. Hybrid bonding orders increased significantly in the second half of 2023 as new logic and memory customers completed their qualification activities to scale production over the next two years.

Besi's hybrid bonding enables designers to bring chiplets of various process nodes and technologies into closer physical and electrical proximity so that they perform as well or better than if they were made on a single large, monolithic die. Hybrid bonding is a major improvement over conventional chip packaging because it permits increased chip contact density and shortens the length of the interconnect wiring between chiplets thereby permitting new 3-dimensional, chiplet-based architectures. It also significantly improves overall performance, speed, efficiency and cost and reduces energy consumption versus substrate assembly, which in turn provides additional sustainability benefits.

Strategic initiatives undertaken to help position Besi for future growth

We updated our strategic plan last year for the period encompassing 2023-2027 given the continued strong growth of Besi's existing advanced packaging portfolio and the significant growth opportunities offered by wafer level assembly. We set new initiatives for Besi's business model to help achieve our revenue objectives in the next industry upcycle as well as enhanced market share, profit and ESG targets. Our key strategic initiatives outlined in the most recent strategic plan included the following:

- Organize Besi for € 1 billion+++ revenue model
- Partner with the Winners 2.0
- Accelerate cost savings
- Develop next level supply chain and service excellence
- Exceed ESG targets for 2024/2030
- Expand leading hybrid bonding position
- Expand share of next generation TCB applications
- Grow silicon photonics market share
- Capture further opportunities in 2.5D applications
- Prepare for CSRD compliance

In anticipation of expected hybrid bonding market growth, we have increased our development and support organization in Austria, Singapore, Taiwan and North America by approximately 37% over the past four years. In addition, we have expanded cleanroom R&D, production and service/support facilities in Austria, Malaysia and Singapore. We also established a new assembly facility in Vietnam and opened a branch office in India in 2023 as many customers began to shift a portion of their production outside of China to other Asian locations. Further, we relocated our operational headquarters from the Netherlands to Switzerland in recognition of the anticipated growth of our Die Attach business. Besi's statutory seat will remain in the Netherlands.

Progress achieved in advancing Besi's ESG strategy

Besi has significantly increased its ESG activities and reporting since 2020 including the development of various short-, mid- and long-term targets through 2050. Since 2019, we have reduced Scope 1 & 2 emissions intensity by 65%, fuel consumption intensity by 46%, water usage intensity by 34% and absolute hazardous waste generation by 27%. In addition, we increased our energy from renewable sources from 18% to 71%. We have also identified and commenced work on 85 initiatives associated with our ESG pillars (Environmental Impact, People Wellbeing and Responsible Business). Many of the initiatives launched this year focused on Besi's environmental impact in our global operations which will favorably position us to meet Scope 1 & 2 emissions targets in 2024 and 2030.

NEW ESG INITIATIVES TO REDUCE BESI'S ENVIRONMENTAL IMPACT

MALAYSIA	NETHERLANDS	AUSTRIA	CHINA	SWITZERLAND
• Fewer shipments from the Netherlands to reduce waste and costs • Purchased renewable electricity at the additional Malaysia facility	• Increased lighting energy efficiency • Installed smart meters • Reduced paper waste • Collaborated with Copernicus Institute for sustainable design	• Expanded existing solar PV system • Installed groundwater heat pump	• Installed centrifuge to increase water recycling • Purchased EV vehicles • Installed EV charging points	• 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				

We are currently on track to meet or exceed most targets established due to a concentrated focus on the ESG topics most material to Besi's business and stakeholders and the commitment of our workforce. In fact, we equaled or exceeded substantially all targets for 2022 set in 2019 and set new targets last year for achievement in 2024 and 2030. In addition, we set an objective of reaching net zero greenhouse gas emissions in our operations by 2030, incorporating all Scope 1 & 2 emissions.

In general, we measure our ESG performance in terms of relative intensity targets given the highly cyclical nature of our revenue development on a year to year or even multi-year basis. Of note, Besi's performance with respect to most relative intensity targets in 2023 was adversely affected by two important factors. The first related to the spike we experienced in our electricity consumption, Scope 2 emissions and waste disposal in the second and third quarters of 2023 associated with the completion of a new production facility in Malaysia and the completion of a new cleanroom in Singapore. The second factor related directly to the 20% revenue decrease we experienced this year associated with the significant industry downturn. Due to both factors, all relative intensity ratios and some performance metrics were adversely affected versus absolute 2022 results and 2024 targets. However, relative intensity ratios began to improve significantly in Q4-23 upon the substantial completion of such projects and increased utilization of renewable energy. We expect to meet or exceed a significant portion of our 2024 ESG targets next year based on current performance and initiatives.

Since 2019, Besi has expanded the scale and scope of its initiatives and reporting activities relative to leading external frameworks such as SASB, GRI, SDG, NFRD, TCFD and the EU Taxonomy. We have also proactively responded to external questionnaires such as the CDP Climate Change and the S&P Global Corporate Sustainability Assessment. In 2020 and 2021, we identified 12 material topics most relevant to our business, established three material ESG pillars and engaged in a four-stage materiality assessment. In 2023, we performed a Double Materiality Assessment as a precondition to compliance in 2024 with Corporate Sustainability Reporting Directive ("CSRD") requirements. We also published a formal policy on our website which provides a strategic view of Besi's management activities across the ESG aspects of our business with respect to both our operations and value chain.

In addition, our ESG ratings with the major publicly recognized agencies such as Sustainalytics, S&P Global, ISS ESG and MSCI improved in 2023 further underscoring our progress. More specifically, we achieved a rating of "AA" in the updated 2023 MSCI ESG Ratings Assessment, up from "A" in 2022 and "BBB" in 2021. Further, in November 2023, Besi's ESG Risk Rating declined to 14.4 as per Sustainalytics versus 17.8 in 2021 highlighting long-term trend improvement. We also continue to be a component of the AEX Sustainability Index.

ESG 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

Progress also continues to advance Besi's sustainable product design as a core component of our long-term value creation model. Toward this end, we developed an initiative named "Design-to-X" this year as part of our strategic plan review. This initiative combines Design-to-Cost and Design-to-Sustainability concepts to identify ESG improvement opportunities in all product groups while reducing the cost of many mature die attach and packaging platforms. It is in its early stages and builds upon the environmentally friendly product design enhancements identified in a collaborative project with the University of Applied Sciences and Arts (Lucerne, Switzerland) ("UASA"). The UASA collaboration led to the creation of roadmaps with the potential to achieve absolute energy savings of approximately 10% per die attach platform over the next five years. Growth in Besi's installed base of hybrid bonding and other wafer level systems also contributes to sustainable product design via an improvement in the overall performance, speed, efficiency, cost and energy efficiency of such systems versus those using leadframe and substrate assembly technologies.

In addition, we experienced improvement with employee and supplier engagement to further Besi's ESG goals. The results of our bi-annual Employee Engagement survey conducted by Willis Towers Watson further highlighted this progress. In general, Besi scored above the high-tech norm in six of seven categories in this year's survey. Specifically, the survey had a high level of participation (94%) and engagement (89%) by our employees. The engagement levels were 5 percentage points higher than the sector's benchmark. Survey results also indicated a high level of satisfaction with our ESG credentials which scored 4 percentage points higher than the sector benchmark and was our most improved category.

Besi also saw increased supply chain participation via an enhanced ESG survey. In this regard, we conducted vendor site visits and stakeholder interviews and circulated questionnaires at their principal Asian production facilities to ensure that temporary and contracted third party workers adhered to the standards outlined in Besi's Supplier Code of Conduct. We also engaged with our supply chain through an ESG briefing roadshow, training sessions and the sharing of ESG-related knowledge with key suppliers. In addition, Besi conducted an ESG assessment survey that focused on our three process pillars. Fifty-five suppliers were sent this survey with a response received from forty-six (84%), representing approximately 50% of our total purchasing volume. Moving forward, Besi will incorporate this ESG scorecard into its periodic audit for annual suppliers. Finally, the percentage of purchasing volume audited and which answered the RBA Code of Conduct Self-Assessment increased from 62% in 2022 to 66% in 2023 marking further progress in our supply chain engagement.

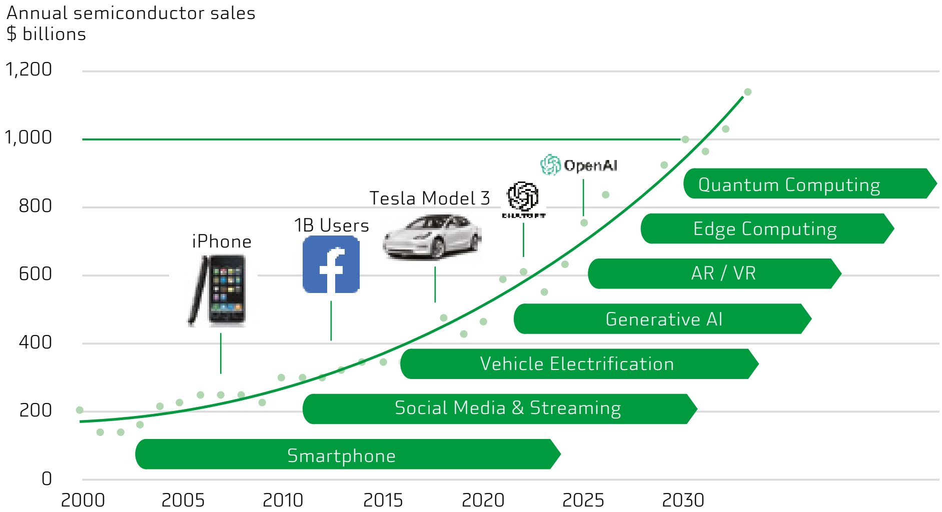
Improving industry outlook entering 2024

We believe we are in the early phase of a new assembly market upturn based on independent research data and customer utilization rates after an industry downturn of approximately 40% from the last cyclical peak in 2021 (as per TechInsights). Industry analysts anticipate that the assembly equipment market will rebound in 2024 and 2025 with forecast growth by TechInsights of 31% and 18%, respectively. The upturn will be driven primarily by a recovery in mainstream and Chinese markets and additional capacity needed for next generation AI logic and memory applications. We saw evidence of increased spending by customers on next generation advanced packaging solutions such as hybrid bonding, silicon photonics and 2.5D HBM/logic applications in our second half revenue and order trends. However, orders for mainstream applications remained relatively restrained comparatively.

There are many variables which could affect the slope of the assembly equipment market trajectory for 2024. Supporting a growth model are (i) utilization rates continue to increase after a severe downturn in assembly capacity starting in the first half of 2022, (ii) new investment in advanced consumer applications incorporating AI in PCs, tablets, laptops and mobile phones continues to build, (iii) initial signs of improvement in Chinese demand for assembly capacity is appearing after a two-year downturn and (iv) customer investment for hybrid bonding and other next generation advanced packaging solutions is expanding. Other favorable trends include increased efforts by governments to onshore more capacity to North America, Europe, Japan and Southeast Asia from China and Taiwan. The growth trajectory for 2024 could be tempered by the path of global growth, geopolitical conflict, the timing of new high-end smartphone introductions and weakness in automotive end-user markets which appeared in the second half of the year.

Looking beyond 2024, the outlook for advanced packaging is positive. Long-term demand trends for semiconductor and AI devices are favorable with revenue anticipated to reach $ 1 trillion by 2030.

SEMICONDUCTOR SALES EXPECTED TO REACH $ 1 TRILLION BY 2030



Data Source: TechInsights

We believe that the pace of innovation is increasing as the pandemic and generative AI have accelerated society's move to an AI-based digital infrastructure wherein technology adoption has greatly increased in our daily lives. Innovation is an important driver of our business.

We believe that the long-term prospects of the assembly equipment market are positive, driven by a variety of secular trends including:

- Increased spending for wafer level assembly technologies as producers seek to further extend Moore's law through new chiplet-based, 3D logic and memory architectures.
- Continued investment in cloud and digital infrastructure and high-performance computing to support the digital society, broad based generative AI adoption and the Internet of Everything.
- Expansion of 5G networks, infotainment, gaming and online financial services which will drive new product introductions and software applications related thereto.
- The mass adoption of electric and autonomous driving vehicles requiring advanced sensors and power devices in more complex assemblies.
- Additional capacity investment for new HBM solutions to support the projected growth in CPU-processing power.
- Construction of new wafer fabrication facilities due to increased demand from leading governments globally to secure adequate access to semiconductor IP development and production.

The development of these secular trends should particularly benefit Besi's advanced packaging product portfolio and increase our addressable market over the next decade.

Besi's leading position in advanced packaging, engagement with the leaders of the semiconductor industry as an important, value-added partner and demonstrated production scalability favorably position us to capitalize on an exciting new era of industry applications and growth. We also believe that our product portfolio is well positioned to capitalize on opportunities in the fastest growing segments of the assembly equipment industry, particularly in leading edge, AI devices.

Technology Advisory Board formed

Besi formed a Technology Advisory Board in 2023 as a means of advancing our knowledge of, and engagement with, those specific topics which will have the greatest impact on our core technology, market, competitive position and growth prospects. The Board will consist initially of three individuals along with Besi's CEO, Richard W. Blickman and Chris Scanlan, Besi's SVP Technology. The external members will initially include Marvin Liao, formerly VP Operations/Advanced Packaging Technology and Service of TSMC, Frits van Hout, formerly Executive Vice President and Chief Strategy Officer of ASML NV and Vincent DiCaprio, currently Vice President at Applied Materials and Head of Business and Corporate Development for its Heterogeneous Integration and ICAPS Business Unit. We are excited to welcome this group of industry experts to the Besi advisory team, particularly given their extensive experience and knowledge of industry trends in advanced packaging and the semiconductor equipment industry.

In closing, we want to thank our employees, customers, suppliers and other stakeholders for their efforts to deliver impressive results in this industry downturn and further our advanced packaging efforts for the next industry upturn.

Board of Management
Richard W. Blickman

February 21, 2024

Market Overview

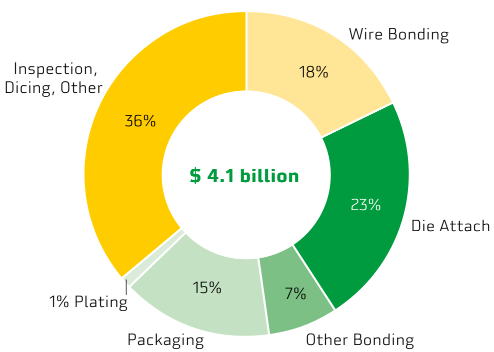
Market Overview

Assembly equipment market

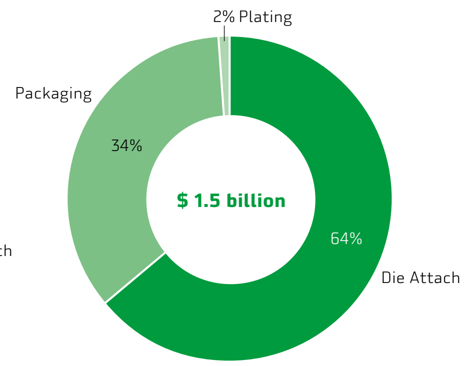
The semiconductor manufacturing process involves two distinct phases: wafer processing, commonly referred to as the front-end, and assembly and test, commonly referred to as the back-end. Once the semiconductor chip (also referred to as a "die") has been created in the front-end wafer fabrication process, Besi's assembly equipment is used by customers to produce advanced semiconductor assemblies or "packages" incorporating a number of process steps such as (i) die sorting or "pick and place" of good versus bad dies, (ii) die bonding to leadframes, substrates, wafers, chips and chiplets to facilitate an electrical interconnection, (iii) die molding to encapsulate the assembled die with an epoxy compound and protect it from external contamination, (iv) chemical plating to provide different physical properties to the package at various stages of the assembly process and (v) trimming and forming of leadframe carriers housing chips and/or singulation (cutting) of substrate and wafer level devices prior to placement on a printed circuit board and ultimately, final testing.

Besi's product strategy focuses primarily on providing advanced packaging solutions to customers which incorporate both substrate and wafer level packaging processes in their semiconductor assembly operations. This represents the most technologically challenging and rapidly growing area of the assembly equipment industry. Our product group offerings for the assembly equipment market include Die Attach and Packaging & Plating which represented approximately 77% and 23%, respectively, of our revenue in 2023.

ASSEMBLY EQUIPMENT MARKET (2023)



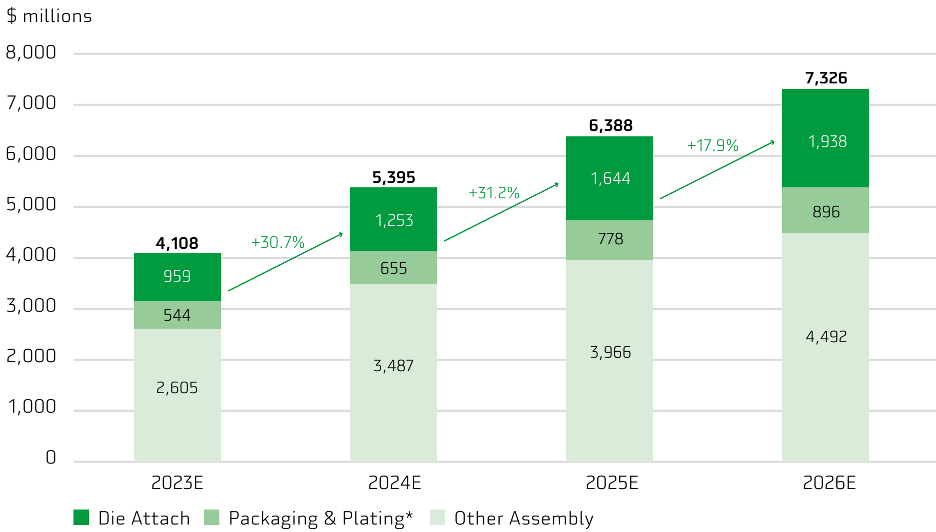
BESI ADDRESSABLE MARKET (2023)



Source: TechInsights, December 2023

TechInsights, a leading independent industry research firm, estimated that the size of the assembly equipment market was approximately $ 4.1 billion in 2023, or approximately 4% of the total semiconductor manufacturing equipment market. The market declined by $ 1.4 billion, or 25.7% versus 2022 reflecting the adverse impact of an industry downturn which began in the second quarter of 2022. As per their estimates, die attach systems represented 23% of the assembly equipment market in 2023. Based on such data, we estimate that Besi's addressable market was approximately $ 1.5 billion in 2023 which represented approximately 37% of the total assembly equipment market. Our estimated addressable market declined by 24% versus 2022 reflecting general market weakness with particular softness in demand for computing applications. Besi has a leadership position in the die attach and advanced die placement markets which are expected to be the most rapidly growing segments of the assembly equipment market over the next five years.

GROWTH EXPECTED TO FAVOR BESI'S PRODUCT PORTFOLIO, PARTICULARLY DIE ATTACH



* Packaging & Plating includes only Besi's addressable segments. Non-addressable reported in other assembly market.

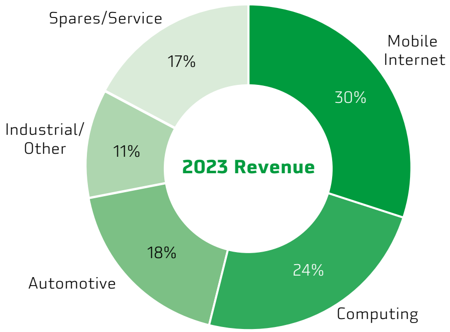
Source: TechInsights, December 2023. TechInsights projections exclude hybrid bonding

	CAGR (2023-2026)
Die Attach	26.4%
Packaging & Plating	18.1%
Other Assembly	19.9%
Total	21.3%

Besi's key end-user markets

Besi has three principal end-user markets: mobile internet, computing and automotive. They represented in the aggregate an estimated 72% of Besi's total revenue in 2023 (2022: 74%). In addition, we serve industrial and other markets (11% and 9% of revenue in 2023 and 2022, respectively) and provide spares and service to our installed base of customers (17% of revenue in each of 2023 and 2022).

BESI END-USER MARKETS

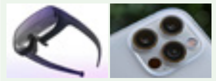


Source: Company estimates

Mobile internet

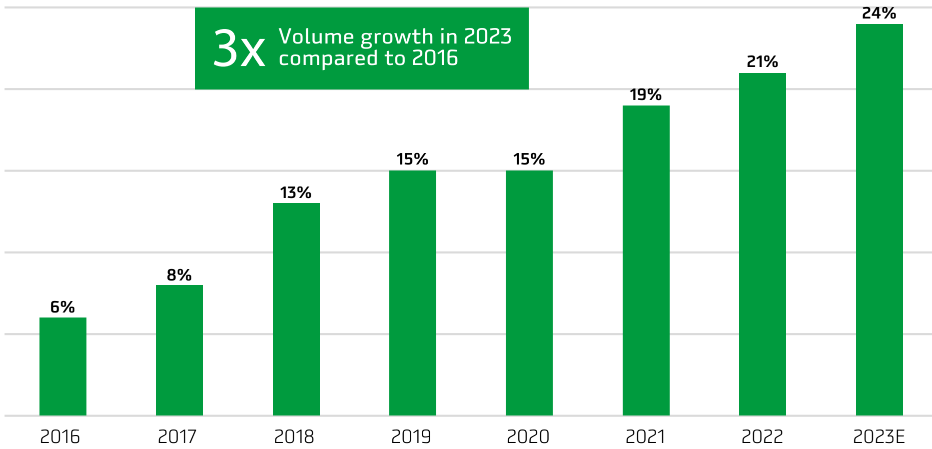
Besi's largest end-user market has traditionally been mobile internet devices to which we sell die bonding, packaging and plating systems to support high-end and mainstream smartphones, wearable internet devices such as wireless watches, headphones, virtual headsets and other related wireless devices and logistical systems. Besi's end-user customers include the largest mobile handset manufacturers and their global supply chains worldwide. Revenue from this end-user market can fluctuate significantly per annum depending on the timing of new product introductions. Through its assembly solutions, Besi helps manufacturers develop next generation mobile device features and functionality such as 5G advanced antennas, front-back facing and periscope cameras, camera modules and enhanced 3D sensing and facial recognition capabilities.

KEY MOBILE MARKET DRIVERS

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

Source: Fonearena, Qualcomm

PREMIUM SMARTPHONE MARKET SHARE GROWING RAPIDLY

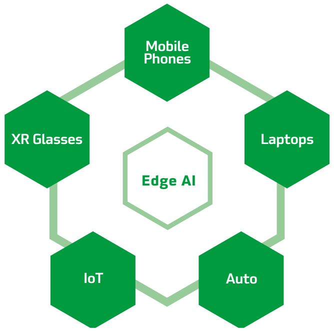


• Premium segment of smartphone market = ≥ US$ 600 wholesale price.

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

A significant customer focus currently is the development of die bonding and packaging solutions for (i) edge computing/AI enabled smartphones, watches, virtual headsets and AI-enabled glasses requiring even more sophisticated camera modules and imaging technologies, (ii) enhanced 3D video, gaming and infotainment applications, (iii) the development of 6G network capacity and (iv) improved security for online payment and banking applications. As such, the market share represented by premium smartphones is expected to grow rapidly over the next decade. Such growth opportunities will require new device architectures incorporating ever higher data transfer speeds and computing capabilities, increased circuit consumption and heat dissipation, all of which will require next generation assembly solutions utilizing Besi's most advanced multi module die bonding, flip chip, TCB, hybrid bonding, molding and singulation systems.

EDGE AI COMPUTING DRIVES NEXT GENERATION CONSUMER APPLICATIONS

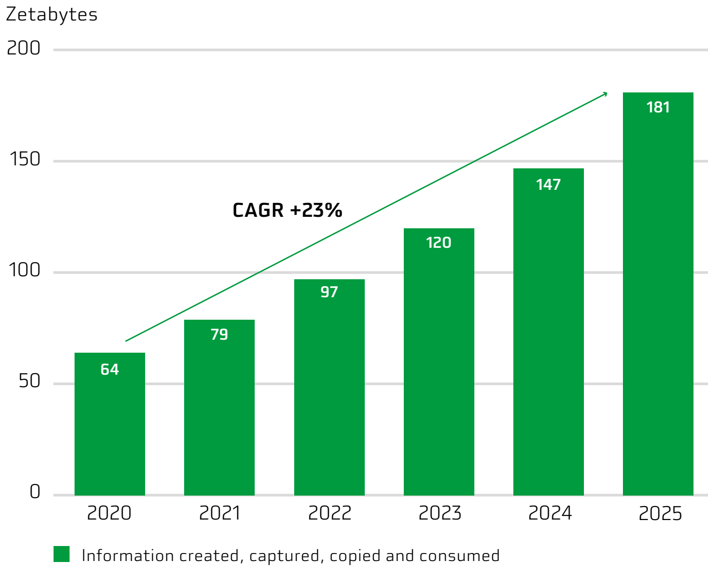


Edge AI Use Cases
Text Generation
Audio and Video Creation
Image and Video Enhancement
Code Generation
Medical Diagnostics
Auto Self-Driving
Environmental Monitoring

Computing

Computing has traditionally been Besi's second largest end-user market. It includes sales of die bonding, hybrid bonding and packaging systems for high-end logic and memory devices used in supercomputers, data center servers, PCs, tablets, flat panel displays and many consumer internet applications such as gaming, entertainment and financial services. Demand for computing power has been growing rapidly over the past decade with the explosion of data volumes and memory needed to power the IT needs of the largest sections of the global economy. The outbreak of the global pandemic in 2020 served to further increase computing demand and growth rates as governments and corporations moved to build out the digital infrastructure necessary to support decentralized workplace environments and help lessen chip shortages affecting the global economy.

DATA VOLUMES GROWING EXPONENTIALLY



- Since 1955, computing demand doubling every two years
- Since 2015, computing demand doubling every 3-4 months
- AI workloads significantly outpacing Moore's Law

Source: Statista, December 2022

Source: OpenAI

KEY COMPUTING MARKET DRIVERS

	Drivers	Assembly solutions
Computing	• New generative AI engines • Supercomputers • Datacenters • Edge AI tablets, PCs, laptops • Gaming and infotainment	• 2.5D/3D chiplet architectures • HBM memory stacking • Co-packaged optics • Optical transceivers
	 	 

One of the most powerful forces driving growth in Besi's computing end-user market today is the rapid adoption of artificial intelligence and virtual and augmented reality in our daily business and personal interactions. End-user customers are highly focused on incorporating generative AI software capabilities in data centers, personal computers, tablets, smartphones and industrial manufacturing, to name just a few applications. Some analysts expect that the artificial intelligence chip market could grow more than twelvefold over the next decade to reach $ 227 billion by 2032. In addition, the AI PC market is expected to grow by a compound annual rate of 50% between 2020 and 2030. We also see increased usage of photonics, particularly in pluggable optical transceivers that are used within high-performance AI servers and data centers to further extend performance and reduce power consumption. Silicon photonics units are expected to grow at a compound annual rate of 34% between 2022 and 2028 to reach 21.9 billion units.

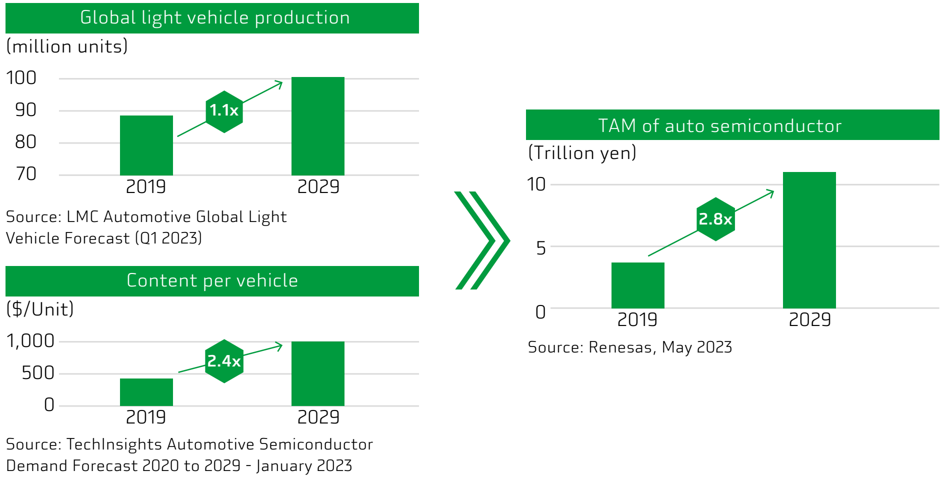
Other computing growth opportunities include the expansion of cloud-based infrastructure and applications necessary to support the new digital society, the usage of software to mine, organize and analyze the massive quantities of data being generated and the proliferation of the Internet of Everything including the smart management of residential, industrial and municipal equipment and functions.

The powerful drivers for high-end computing growth over the next decade will require not only new means of extending Moore's law on a cost-efficient basis through new logic and memory architectures incorporating 2.5D/3D chiplet architectures but also new wafer level assembly solutions. At present, the most significant investment by semiconductor producers has been for next generation logic devices in data center and supercomputer applications utilizing hybrid bonding, TCB chip to wafer, advanced flip chip and multi module die bonding assembly processes. The significant increase in power, performance, functionality and speed of logic devices has also required new memory solutions such as high bandwidth memory ("HBM") in vertical 3D stacks of chips and chiplets to match such performance improvements for next generation devices. In fact, the high bandwidth memory market is expected to grow by a factor of 10 to approximately $ 33 billion between 2023 and 2027. The current generation of HBM3 memory devices and HBM4 and HBM5 architectures in development utilizing new process technologies such as hybrid bonding and TCB for die stacking are expected to drive substantial growth in advanced packaging requirements over the next decade.

Automotive

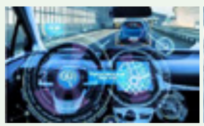
Besi's automotive end-user market consists principally of the sale of die bonding, packaging and plating systems for intelligent automotive components, sensors and subsystems to leading European, North American and Japanese automotive suppliers. Besi's system solutions address critical automotive requirements such as power, safety, reliability, intelligence and autonomous driving capabilities. Our addressable automotive market has grown significantly in recent years due to the increased use of semiconductors and electronics to deliver increased power, performance and functionality to consumers.

FAVORABLE AUTOMOTIVE MARKET OUTLOOK



Projected growth in this end-user market reflects (i) the ever-increasing electronic content and artificial intelligence necessary to deliver increased computing power and functionality for autonomous driving and infotainment capabilities and (ii) the usage of more dense, integrated and complex power and silicon carbide ("SiC") devices as the industry moves to electric and computer driven vehicles in response to environmental and climate change concerns. Growth in such applications will also increase the semiconductor content and the cost of semiconductor content per car in the future.

KEY AUTOMOTIVE AND INDUSTRIAL MARKET DRIVERS

	Drivers	Assembly solutions
Auto/ Industrial	• EV adoption • Edge AI enhanced features • SiC and GaN power devices • Advanced camera modules and sensors • Autonomous driving • Factory automation 4.0	• 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
	 	

Industrial and other

In industrial and other end-user markets, Besi sells its full range of systems for a variety of applications including advanced power, industrial IoT, robotics, medical, high-end lighting and LED devices, solar cell technology, lithium-ion battery and renewable energy. In addition, the move to an AI powered Industry 4.0 is creating additional demand for semiconductors used for sensing, actuation and control in a wide range of industrial applications. For example, industrial IoT systems are being developed to integrate wireless communication modules with sensors to provide remote, centralized control of industrial equipment. Besi systems are also used in the production of industrial power conversion systems that employ advanced power switching devices to increase their efficiency and reduce their electrical power consumption. These new applications require the increased use of Silicon IGBTs, SiC and Gallium Nitride ("GaN") devices which can significantly increase efficiency and performance but will require a new range of assembly equipment solutions.

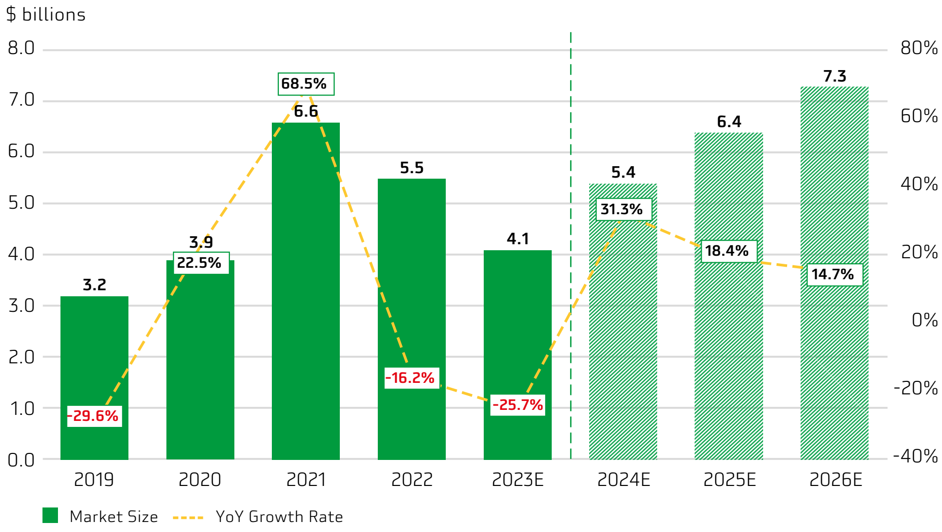
Spares and service

Revenue from Besi's spares and service activities represented approximately 17% of total revenue in each of 2023 and 2022, respectively. In general, revenue from these activities has grown significantly over the past decade reflecting the increase in our installed base of systems and increased customer requirements for onsite production assistance associated with our most advanced packaging systems. Revenue from spares and service activities is typically less cyclical than from our equipment sales.

Assembly equipment market trends

TechInsights currently estimates that the semiconductor assembly equipment market decreased by 25.7% versus 2022 and by a total of 37.7% from the last cyclical peak in 2021 to the end of 2023. The current downcycle has been driven primarily by lower demand for mobile handsets, PCs, laptops, wearables and gaming consoles post large capacity builds in 2020 and 2021. It also reflected lower growth by hyperscalers for cloud infrastructure applications as well as an inventory correction by semiconductor producers from elevated levels during the COVID-19 pandemic. Market growth was further adversely affected by a significant decline in orders from Chinese subcontractors due to assembly overcapacity conditions in that country, decelerating economic growth and the adverse effects on economic activity of COVID-19 lockdowns. Decreased demand for mobile and computing markets was partially offset by growth in automotive and power end-user markets as demand for vehicles continued to rebound from 2020 trough levels.

ASSEMBLY EQUIPMENT MARKET TRENDS 2019 - 2026E



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

Looking forward, TechInsights estimates that the assembly equipment market will increase by 31% in 2024 as excess inventory is consumed, capacity utilization rates rise and demand for new advanced packaging solutions increases. They believe that an industry trough was reached in 2023 and that a new industry upturn has begun which will continue through 2026 with growth of 78% from trough levels in 2023. Further, their estimates exclude revenue from hybrid bonding and other wafer level assembly technologies which could increase growth rates higher.

We believe that the long-term prospects of the assembly equipment market are favorable, driven by a variety of secular trends including:

- Increased spending for wafer level assembly technologies such as hybrid bonding and TCB chip to wafer systems as semiconductor producers seek to further extend Moore's law through new chiplet-based, 3D logic and memory architectures.
- Continued investment in cloud and digital infrastructure, and high-performance computing to support the digital society, broad based generative AI adoption and the Internet of Everything.
- Expansion of 5G networks, infotainment, gaming and online financial services which will drive new product introductions and software applications related thereto.

- The mass adoption of electric and autonomous driving vehicles requiring advanced sensors and power devices in more complex assemblies.
- Additional capacity investment for new high bandwidth memory solutions to support the projected growth in CPU processing power.
- Construction of new wafer fabrication facilities due to increased demand from leading governments globally to secure adequate access to semiconductor IP development and production.

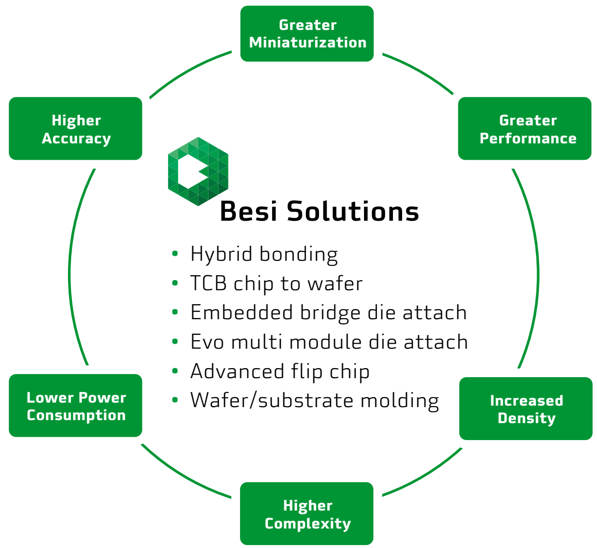
The development of these secular trends should particularly benefit Besi's advanced packaging product portfolio and increase our addressable market and market share over the next decade.

Strategically well positioned for next generation of electronics applications

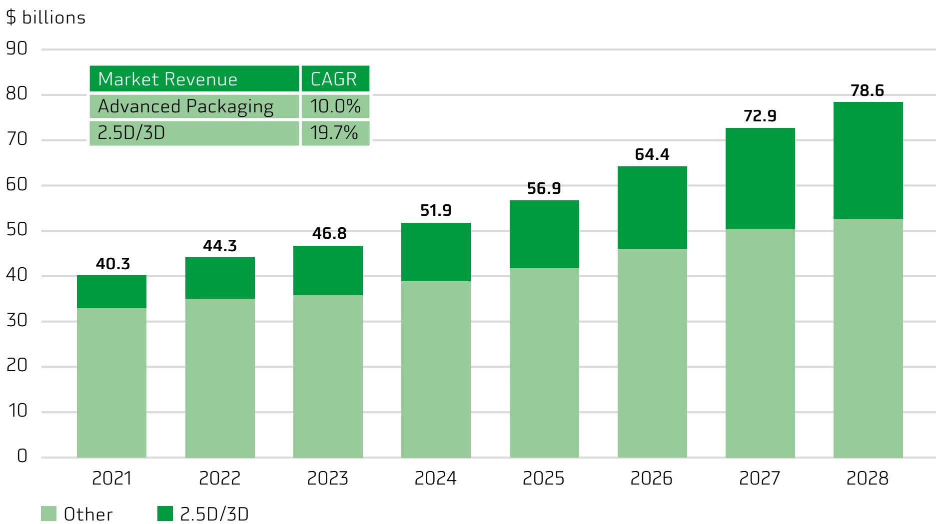
We believe that we are in the early stages of a transition to an AI enabled, digital society accompanied by a new generation of sustainable and more environmentally friendly electronics applications. In such a society, intelligence and electronic content will increase in all facets of our life including medical care, homes, factories, municipalities and transportation. We see evidence daily of new productivity enhancing technologies such as cloud computing, 5G networks, Chat GPT, Gemini, Microsoft 365 Co-Pilot and other artificial intelligence software, data mining and predictive analysis, autonomous driving, robotics and blockchain software. In response, new leading edge semiconductor devices are being developed which will play a critical role in furthering the use of many such applications. In fact, the adoption of generative AI is estimated by analysts to have a faster adoption rate in our society than any other 21st century technology, including the smartphone.

Consistent with these trends, a new technology cycle is underway wherein customers increasingly demand more complex advanced packaging solutions containing ever more functionality in ever smaller form factors with sub-micron die placement accuracy. Advanced packaging is now recognized by customers as a critical part of the semiconductor value chain and a gating item to produce next generation devices. As such, Besi is actively involved with the leading semiconductor producers and supply chains at an early stage in the design process to help them achieve their future device roadmaps. We are well positioned with advanced packaging revenue representing approximately 70% of Besi's total system revenue and revenue from the most leading edge applications with <7 micron die placement accuracy representing approximately 50% of total system revenue.

ADVANCED PACKAGING SOLUTIONS CRITICAL TO NEXT GENERATION APPLICATIONS



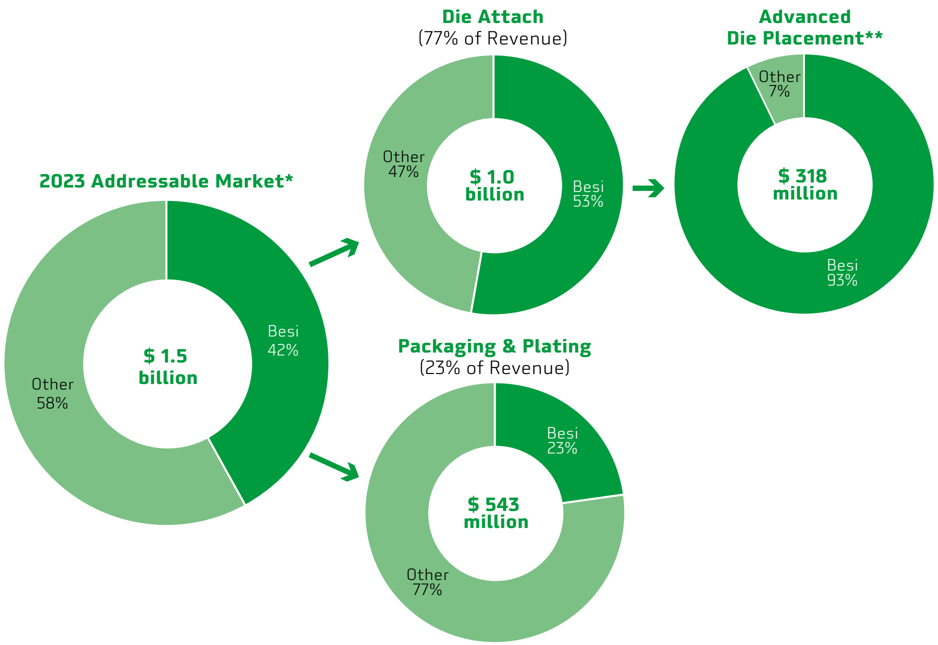
ADVANCED PACKAGING REVENUE GROWING RAPIDLY. 2.5D/3D FASTEST GROWING SEGMENT



Source: Yole, November 2023

Besi's leading position in advanced packaging, engagement with the leaders of the semiconductor industry as an important, value-added partner and demonstrated production scalability favorably position us to capitalize on an exciting new era of industry applications and growth. We also believe that our product portfolio is well positioned to capitalize on opportunities in the fastest growing segments of the assembly equipment industry, particularly in leading edge, advanced die placement.

LEADER IN ADDRESSABLE MARKET, DIE ATTACH MARKET AND ADVANCED DIE PLACEMENT



* Excludes wire bonding, dicing, and other.

** Advanced die placement defined as < 7 micron accuracy per TechInsights.

Source: TechInsights, December 2023. Equipment only

Hybrid bonding adoption has potential to significantly increase size of assembly equipment market, Besi's addressable market and our market share

A key strategic focus currently is the expansion of Besi's penetration of both logic and memory markets accompanying the infrastructure growth necessary to power the digital society of which advanced packaging plays a critical role. We signed a joint development agreement with Applied Materials in October 2020 to develop the industry's first integrated equipment solution for die-based hybrid bonding. Applied Materials leads the wafer fab equipment industry in the materials and systems used to create on-chip interconnects, with products spanning etch, CVD, PVD, copper electroplating, CMP and process control. Hybrid bonding represents the next evolution of die bonding technology as the semiconductor market moves from substrate to wafer level assembly. It enables a direct, copper-to-copper connection between chips, chiplets and wafers with much higher interconnect density than previously possible.

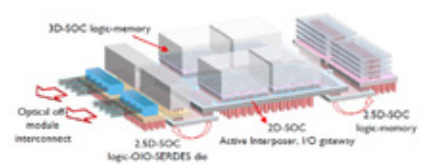
HYBRID BONDING ENABLES FASTER, MORE COMPLEX DEVICES WITH SUBMICRON PLACEMENT ACCURACY

Direct Cu-Cu 3D Interconnect

Source: Intel

+

Heterogeneous Chiplet Integration



Source: IMEC

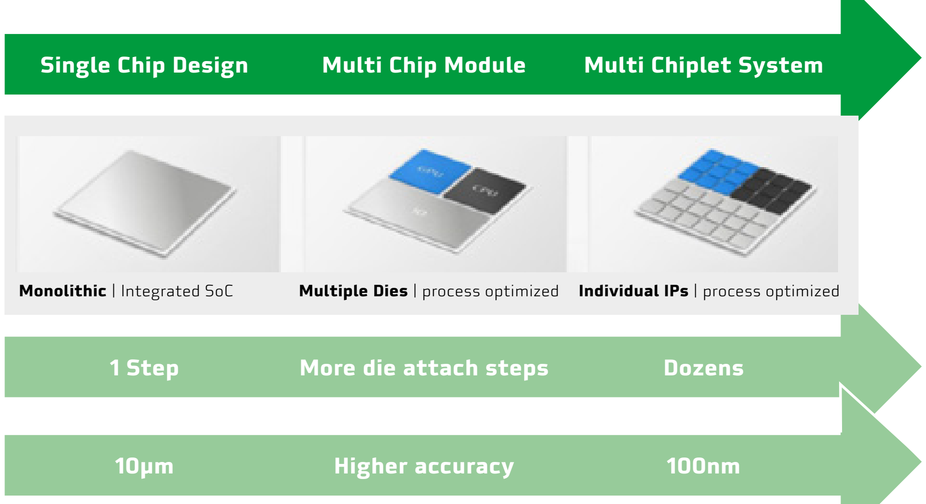
1,000x increase in contact density

More transistors per package

New chip architectures	Increased performance	Lower cost of ownership
• Quasi-monolithic 3D • Optimal use of nodes • Customized designs • Highly configurable	• Highest compute power • Increased data transfer • Higher bandwidth • Higher speed	• Higher die yield • Lower energy per bit • Lower cost per contact • Lower heat dissipation

Hybrid bonding offers many advantages to customers in terms of form factor, power, energy efficiency, contact density, data transmission speed and cost of ownership. It can greatly expand data transmission speeds with substantially higher contact density than prior assembly process technologies while reducing heat dissipation and consuming less energy per bit. As such, it also represents an important advancement in ESG semiconductor manufacturing technology. In addition, the usage of chip scale, wafer level packaging integrating a variety of heterogeneous chip functions and architectures enables customers to create ever smaller, more dense, complex and powerful devices in new 3-dimensional architectures with significantly increased features and functionality versus current substrate-based process technologies. Given demanding specifications, it is more like a front-end process technology in that it requires a cleanroom production environment to eliminate particulate contamination. Equally important, it enables the integration of heterogeneous functions such as logic, memory and specific feature components in chiplet-based architectures. Using hybrid bonded chiplets, customers can create the smallest, most complex and powerful devices in the semiconductor market at geometries <7 nanometers and at a placement accuracy ten times smaller than the most advanced assembly technology currently. As such, customers benefit from increased circuitry speed, density and performance while significantly reducing their overall cost of ownership. The use of disaggregated chips, or chiplets, in next generation architectures also helps producers to significantly lower their cost of ownership as they scale down Moore's Law curve below 7 nm geometries in the face of rapidly escalating wafer fabrication costs. The use of chiplet technology in wafer level assembly can also drive increased capital intensity for hybrid bonding and TCB chip to wafer systems given the increased number of process steps required to achieve heterogenous integration of disparate semiconductor functions.

CHIPLET ADOPTION DRIVES HIGHER CAPITAL INTENSITY

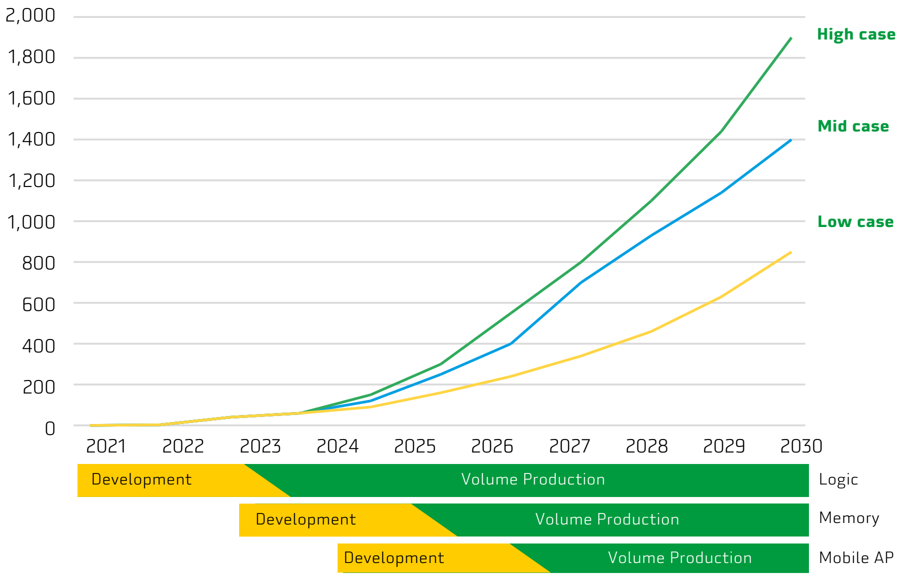


Source: Intel

Hybrid bonding process technology has the potential to become the leading assembly solution for device geometries <3 nanometers over the next decade. Each of the largest global semiconductor producers is currently evaluating its adoption in their future device roadmaps. Currently, hybrid bonding has been successfully utilized for the commercial production of high-end logic devices for data centers and other high-performance computing applications. Potential applications are numerous including data centers, high-end servers, high-performance computing, artificial intelligence, photonics, high-end smartphones, PCs, laptops, wearables, gaming, entertainment, autonomous driving and medical. They also have the potential to significantly increase the capital intensity and size of the assembly equipment market over the next decade. Adoption by the largest semiconductor producers is anticipated to occur over the next five years with further adoption by assembly subcontractors thereafter. Average selling prices will be significantly higher than the most advanced flip chip or TCB bonding systems currently given their complexity, increased number of process steps, cleanroom requirements, throughput and significant R&D investment. The market potential for hybrid bonding process technology is significant as indicated in the table below:

HYBRID BONDING MARKET POTENTIAL

Cumulative TAM of installed hybrid bonding systems



Source: Besi estimates, June 2023

Cases based on potential adoption scenarios.

We believe that the hybrid bonding market is tracking at the mid-point of its estimated market size. Its market acceptance should help drive growth both for the assembly equipment market and our addressable market at rates higher than those experienced over the past two decades. In addition, hybrid bonding adoption will also expand demand for other advanced packaging assembly technologies such as TCB chip to wafer, embedded bridge die attach, advanced flip chip and multi module die attach systems in new device architectures, all of which can further increase the potential growth of our addressable market. Given our initial leadership position in this segment, we hope to expand both Besi's revenue potential and market share over the next decade.

Increased focus on sustainability and climate change in production of next generation devices

Society and customers in each of our end-user markets are increasingly interested in sustainability as they seek to operate in a safer, more environmentally efficient manner. In fact, the semiconductor industry will contribute significantly to the long-term energy transition away from fossil fuels by the development of AI chips to reduce energy consumption, optimize energy efficiency and facilitate the usage of renewable energy technologies.

Many of Besi's assembly systems are used to assemble more efficient semiconductor devices and reduce material and energy consumption. During the COVID-19 pandemic, our systems helped facilitate a more decentralized working environment which contributed to reductions in corporate and personal travel and congestion in urban environments. In addition, our ability to rapidly scale production during the pandemic played an important role in helping not only satisfy increased customer demand but also in reducing supply chain shortages globally, particularly for consumer devices such as smartphones, automobiles and various computing equipment and software related thereto.

Besi's advanced packaging technologies have assisted in the development of the digital society with our systems performing an important role in the development of artificial intelligence, 5G networks, high-performance data centers and blockchain software. They also have aided in the development of smart cities, smart manufacturing, smart mobility and self-driving electric cars with artificial intelligence. Hybrid bonding and TCB chip to wafer process technologies will further contribute to the development of a digital society with its promise of significantly increased data transmission speeds and increased power and functionality in ever-smaller form factors. The use of hybrid bonding systems can also contribute positively to sustainability as it promises significantly lower resource and energy consumption in the assembly manufacturing process. Our systems also contribute to a more efficient and cleaner world by means of longer battery life for electronic devices, more efficient solar cells and lower power consumption and heat dissipation in smartphones. Additionally, increased automotive electronic content and intelligence can help foster the development of next generation electric and autonomous vehicles without fossil fuel generated combustion engines.

Another trend which affects Besi's business and end-user markets is the circular economy. As opposed to a linear economy in which we make, use and dispose of materials, a circular economy emphasizes (i) the usage of materials for as long as possible, (ii) the extraction of their maximum value while in use and (iii) the recovery and regeneration of products and materials at the end of their useful service life. Besi contributes to the circular economy by designing high quality, flexible systems which have long useful lives and can be repurposed by customers or by us for other production requirements to extend their useful lives. In addition, Besi is actively developing more energy efficient equipment with reduced materials and energy consumption as well as lower failure rates, all of which can help lessen waste. For more information, please refer to the Environmental, Social and Governance Report.

Strategy

Strategy

Mission

Besi's mission is to become the world's leading supplier of semiconductor assembly equipment for advanced packaging applications and to exceed industry average benchmarks of financial performance. We also strive to create long-term value for stakeholders and operate our business in a sustainable way respecting both the environment and society.

Summary strategy and long-term sustainable value creation model

Long-term success in the assembly equipment industry requires technological leadership, customer alignment, system reliability and high levels of accuracy in 24/7, high volume production environments. Other key factors include production flexibility and scalability in response to volatile shifts in demand for an industry whose cycle times have become ever shorter. We also recognize the importance of environmental, social and governance considerations in the development of our strategy such as our carbon footprint, the sustainable performance of our systems and the development of a business culture which is diverse, respects the rights of our employees and promotes the skills and talents of our personnel. Besi's business strategy has been developed with these considerations in mind.

One of our top priorities is the maintenance of technological leadership in the advanced packaging segment of the industry. This is the most rapidly growing part of our business with the greatest potential for future growth. We aim to leverage Besi's technological leadership position to generate ever higher levels of through-cycle revenue, profitability and cash flow via a highly scalable and flexible production model. Weekly analyses of order development and the supply chain combined with disciplined cost control efforts have enabled us to respond rapidly to changing market conditions, retain superior margins and generate high levels of cash flow to support a shareholder friendly capital allocation policy.

BESI'S LONG-TERM SUSTAINABLE VALUE CREATION MODEL

CAPITALS	INPUT	OUTPUT	STAKEHOLDERS
Intellectual	• Significant investment in research and development • Know-how of our people • Our intellectual property	• Leading edge assembly solutions • Sustainably designed systems • Partnership with industry leaders	**Customers**
Human	• 1,870 worldwide employees • Flexible workforce • Responsible ethics, labor and tax practices	• Committed and engaged employees • Long-term customer relationships • Increased customer satisfaction • Expand addressable market	**Employees**
Natural	• Minerals, metals and other raw materials • Natural and renewable energy sources	• Recyclable materials • A light carbon footprint • Higher % of renewable energy • Conservation of natural resources	**Society**
Industrial	• Our global production and supply chain • Components, modules and semi-finished products we purchase	• Value-added assembly • Scalable, sustainable and responsible supply chain • Flexible production model	**Suppliers**
Financial	• Strategic planning • Capital allocation • Capital markets funding • Acquisitions	• Peer-leading financial metrics • € 1.3 billion returned to shareholders (5 years) • Average ROAE of 39.5% (5 years) • Total shareholder return 812.5% (5 years)	**Shareholders**

IMPACT

Environmental footprint

- Promote cleaner environment. Mitigate climate change
- Longer battery life in electronics
- Lower power consumption and heat dissipation in smartphones
- Lead free content in PCBs
- Reduced waste, water, energy, packaging and hazardous materials
- More efficient solar cells
- Electric vehicle usage
- Reduced greenhouse gas emissions

Digital society

- Promote new applications in digital society
- Smart infrastructure, manufacturing and homes
- Better communication, mobility, medical care and security

Communities

- Provide safe and healthy working environment
- Invest in well-being of employees/communities
- Promote training, local sponsorship, investments, diversity and inclusion and human rights

Shareholders

- Offer attractive total long-term returns

Besi's Board of Management reviews its strategy on a regular basis. We engaged an independent consulting firm in 2016, 2019, 2021 and 2023 to help assess our strategic plan and long-term sustainable value creation model and formulate specific market, product, revenue, ESG and cost initiatives. The most recent plan assessment encompassed the period 2023-2027, took place over a 16-week timeframe and involved the participation of, and feedback from, various stakeholders such as extended management, employees, customers, the Supervisory Board and shareholders to help define key issues and initiatives. Besi's development and successful execution of strategic initiatives have favorably influenced our organizational development, competitive position and financial performance in recent years.

Strategic objectives

The key initiatives to realize our strategic objectives and long-term sustainable value creation can be summarized as follows:

Through the implementation of these strategic initiatives, Besi seeks to:

- Increase revenue at rates exceeding the growth rate of the assembly equipment market.
- Reduce revenue volatility.
- Become a more efficient and profitable company with increased market share in those segments of the assembly equipment market with the greatest long-term growth potential.
- Enhance production scalability and flexibility to better serve our customers and improve our performance during semiconductor cycles.
- Achieve our strategic objectives responsibly for the benefit of all stakeholders, partners, the environment and the local communities in which we operate.
- Be a good employer, focused on employee wellbeing and fostering a workplace culture that encourages employees to grow and excel in their careers.

In addition, Besi wants to be a meaningful partner in the emerging digital society and to further advance information and communication technologies which can benefit sustainability themes in the future.

Our key business model objectives for the next five-year period are set forth in the chart below:

KEY BUSINESS MODEL OBJECTIVES

	Business Model
Revenue	€ 1 billion+++
Addressable market share	40%+
Gross margin	60-64%
Operating margin	30-45%
Headcount split	80% Asia/20% Europe/NA
Scope 1 & 2 emissions	62% reduction
Global energy needs	75% from renewable sources

Maintain technology leadership

Besi aims to provide global semiconductor manufacturers and subcontractors with a compelling value proposition consistent with market requirements and new product development roadmaps. We seek to differentiate ourselves in the marketplace by means of a technology-led product strategy that capitalizes on revenue opportunities in both premium and mainstream assembly equipment markets. Besi enters such markets with leading edge technology and products appealing to the first movers of the industry, typically leading global semiconductor manufacturers and other advanced industrial end-users. Upon commercial acceptance, we then attempt to maximize the return on product investment through continued system cost of ownership reduction so that they appeal to a broader, more mainstream customer base and extend their product life cycle. Mainstream customers are often Asian assembly subcontractors. Besi exits product markets when its technology becomes commoditized and returns on investment become unattractive. In pursuing its product strategy, Besi uses its core competency to (i) enhance the sustainable design of its systems, (ii) increase its revenue, addressable market and market share and (iii) maximize the return on its technology investment.

Over the past five years, Besi has developed next generation die attach and packaging systems with a particular emphasis on a new portfolio of wafer level assembly systems facilitating heterogeneous 3D device architectures. Efforts have focused on customer requirements for (i) increased accuracy, performance, chip density and complexity, (ii) lower power consumption and heat dissipation, (iii) thinner devices and higher levels of miniaturization, (iv) sustainable design to reduce material consumption and increase energy efficiency and (v) shorter lead times, all at a lower overall cost of ownership. In addition, we design enhanced versions of each product line every one to two years to ensure that Besi's systems maintain their technological leadership in the areas of form factor, placement accuracy, reliability, throughput and sustainability.

Key highlights in recent years include the development for production environments of:

- Hybrid bonding systems capable of integrating multiple heterogeneous chips, chiplet functions and wafers via a high-density copper interconnect.
- Next generation TCB chip to wafer and embedded bridge die attach systems for use in wafer level, 3D assembly applications.
- Next generation multi module die bonding systems capable of assembling multiple, complex devices for advanced features such as 3D image sensing, facial recognition, high bandwidth memory ("HBM") and silicon photonics using 2.5D architectures.
- First in-line flip chip system for the placement of HBM and logic devices in 2.5D architectures at industry leading throughput and flexibility.
- Assembly solutions for advanced 5G smartphones, watches, headphones, virtual headsets, AR glasses, electric vehicles and autonomous driving.
- Fan out wafer level die bonding systems and wafer level molding systems for 2.5D and 3D device architectures.

In addition, Besi is re-engineering several of its existing product platforms to enhance their sustainability and reduce their overall cost and manufacturing cycle time through more standardized design and manufacturing processes. As part of the streamlining process, we have incorporated common parts and common platforms for each successive, next generation die bonding and packaging systems with the objective of decreasing the number of platforms for such products. This initiative will enable Besi to (i) enhance sustainability via a reduced number of components and machine parts utilized per system, (ii) decrease average component costs, (iii) greatly simplify design engineering, (iv) shorten cycle times and (v) lower warranty expense. In addition, we introduced this year a Design-to-X initiative to further promote sustainable design across our product portfolio. The objective is to reduce our customer's total cost of ownership while optimizing material consumption and energy efficiency. In such ways, we expect to achieve enhanced labor, supply chain and working capital efficiencies and lessen its products' environmental impact.

Increase market presence in addressable markets

Key to increasing our market presence and addressable market is the development of close, strategic relationships with customers at the forefront of semiconductor technology deemed critical to our technological leadership and growth. Besi's customer relationships, many of which exceed 50 years, provide us with valuable knowledge about semiconductor assembly requirements as well as new opportunities to jointly develop assembly systems. As such, they provide us with important insights into future market trends and opportunities to broaden the range of products sold to customers.

In order to sustain close relationships with customers and generate new product sales, Besi believes that it is critical to maintain a significant presence in after-sales and service in each of its principal markets. As such, Besi currently has 13 regional sales and service offices in the Asia Pacific region, Europe and North America and a direct sales force and customer service staff of over 250 people at year end. Consistent with the migration of customers to Asia, we have strengthened our sales and customer service activities in this region and have shifted a significant portion of our resources to countries such as Singapore, China, Malaysia, Thailand, Taiwan, Korea and Vietnam. Further, we centralized all global spare parts activities in one business unit based in Singapore to increase customer satisfaction and efficiency. We plan to expand our Asian process support, order fulfillment and field service capabilities over the next five years to better serve a rapidly growing installed base of customers in the region.

We seek to increase long-term, sustainable revenue growth by expanding Besi's addressable markets and market presence via the following initiatives:

- Pick the Winners: Leverage our leadership position in substrate and wafer level assembly technology to engage with customers at the forefront of leading edge applications.
- Expand market position profitably in wafer level assembly via our first mover advantage in hybrid bonding as well as advanced packaging systems for 2.5D architectures.
- Provide new assembly solutions for next generation mobile, computing and automotive applications in the areas of cloud and high-performance computing, generative AI, edge computing, high bandwidth memory, silicon photonics, 5G advanced network compatibility, autonomous and electric vehicles and virtual and augmented reality.
- Create new assembly solutions for industrial IoT and industrial power conversion applications requiring the increased use of SiC and GaN devices.
- Achieve net zero greenhouse gas emissions in our operations by 2030 and challenging ESG targets for 2024 and 2030.

KEY STRATEGIC INITIATIVES

Organize Besi for € 1 billion+++ revenue model	Partner with the Winners 2.0	Accelerate cost savings	Next level supply chain and service excellence
Exceed ESG targets for 2024/2030	Expand leading hybrid bonding position	Expand share of next generation TCB	Grow silicon photonics market share
	Capture opportunities in 2.5D applications	Prepare for CSRD compliance	

Activities undertaken in 2023 to better position Besi for future, sustainable growth included the following:

- Strategic plan updated through 2027. Confirmed revenue goal of € 1 billion+++ as well as initiatives to increase market share at peer leading margins.
- Singapore and Malaysian cleanrooms completed to support growth of Besi's hybrid bonding and wafer level assembly activities.
- Vietnam assembly facility and Indian service office established to facilitate customer expansion outside of China.
- ESG initiatives expanded including Design-to-X philosophy for sustainable product design.
- Goal of net zero greenhouse gas emissions in our operations set for achievement by 2030, incorporating Scope 1 & 2 emissions.
- Double Materiality Assessment conducted in preparation for compliance with the CSRD in 2025.

The expansion of Besi's addressable markets and revenue potential will also be aided by ongoing efforts to further improve our competitive cost position via strategic cost reduction initiatives.

Expand presence in wafer level assembly applications

A key strategic focus currently is the expansion of Besi's penetration of both logic and memory markets in the era of cloud and high-performance computing, artificial intelligence and the Internet of Everything of which advanced packaging plays a critical role. Toward this end, we collaborate with Applied Materials, the leader in front-end wafer fabrication tools and processes, to help promote the adoption of integrated production lines for hybrid bonding incorporating our hybrid bonding tools. Hybrid bonding represents the next evolution in interconnect technology as the semiconductor market moves from substrate to below 1 micron accuracy wafer level assembly. Its adoption will also expand demand for other Besi advanced packaging solutions such as TCB chip to wafer and embedded bridge die attach systems and advanced flip chip die bonding systems further increasing the potential growth of our addressable market. In this regard, we shipped this year our first, next generation TCB chip to wafer system with industry leading accuracy and our first in-line flip chip system for the placement of HBM and logic devices in 2.5D architectures at industry leading throughput and flexibility.

At present, Besi has a leadership position in the development and sale of hybrid bonding systems to the industry's leading producers with significant orders received over the past three years. An important focus of our strategic planning review involved refinements to Besi's organization and management structure in order to realize the potential of this new revenue stream while maintaining the exciting growth opportunities available for our existing advanced packaging portfolio. Toward this end, we dedicated senior management personnel to manage a new die bonding unit apart from Besi's mainstream die bonding activities in order to provide proper focus and customer engagement for wafer level applications. In addition, we significantly increased development staff in Austria and Singapore and added service support in Taiwan and North America for new advanced packaging and hybrid bonding production lines. We established cleanroom facilities in Austria, Malaysia and Singapore over the past three years to accommodate future hybrid bonding production and customer process support. In addition, Besi opened a new 125,000 square foot Malaysian facility to expand our capabilities in alignment with customer roadmaps. We intend to dedicate additional management, development and production resources to help ensure the success of this promising growth opportunity.

Enhance scalability. Reduce structural costs

The semiconductor equipment market has become increasingly more volatile in recent years due to heightened global economic uncertainty, trade tensions, changing end market applications, more seasonal purchasing patterns and shorter lead times for delivery. In response, Besi fundamentally reorganized its global operations and management structure to streamline operations, transfer production and supply chain activities to its Asian operations, improve returns from its product portfolio, reduce break-even revenue levels and increase through cycle profitability. European and North American headcount was significantly reduced, inefficient operations closed and substantially all European production and all tooling capacity transferred to our Malaysian and Chinese facilities. In addition, Besi made strategic capital investments over the past two decades to expand production, development and administrative activities in Asia including Singapore and Vietnam to better service a customer base that migrated from Europe and North America to Asia and more recently, from China to Southeast Asia. In 2023, approximately 76% of revenue was derived from sales to Asian customer locations. We have also funded expansions over the past decade of our Malaysian and Chinese production facilities and Singapore development/sales and service center to expand capacity and better service our Asian customer base.

In the Besi operating model, all system production, sourcing, product applications engineering, process and software support and tooling/spares operations take place at Besi's Asian locations. All product ownership and new product development remain at our European operations. Only highly customized systems are produced in Europe for which we generate attractive gross margins. In recent years, Besi has diversified its Asian manufacturing and engineering capabilities to further drive cost reduction, increase capacity, technical and field service support and enhance our local presence.

We have also actively developed and qualified local supply chains for each of our Malaysian and Chinese operations which produce substantially all modules and subassemblies used in our assembly and plating system production. The successful development of a flexible Asian supply chain is an important factor in our profitable navigation of volatile semiconductor equipment markets and low capital intensity. Strategic initiatives were also implemented to (i) increase the scalability and flexibility of Besi's production model via the use of temporary Asian production personnel and the establishment of high-quality Asian supply chain networks, (ii) further reduce European facility space and fixed headcount and (iii) simplify and harmonize diverse manufacturing and IT processes.

As a result, Besi has significantly reduced labor, material and overhead costs, improved delivery times and inventory turnover and enhanced its local presence. We have also been able to scale our operations on a timely basis in response to volatile industry trends over the past five years while consistently improving gross margins. Increased scalability combined with tight inventory control have also greatly expanded Besi's cash generation capabilities and market share potential.

Cleanroom Besi Austria.

Integration of ESG objectives into Besi's long-term business strategy

Besi has engaged in a new, more robust approach to managing and reporting on ESG topics. We have also actively promoted the integration of ESG topics and initiatives into our long-term value creation model. In 2020, we established a framework with three principal pillars (Environmental Impact, People Wellbeing and Responsible Business). We defined near and long-term goals, ambitions and activities for the next decade whose adoption and acceptance have been well received by our organization and stakeholders. In 2020 and 2021, we identified 12 material topics most relevant to our business and engaged in a four-stage materiality assessment. In 2023, we conducted a Double Materiality Assessment as a precondition to compliance with Corporate Sustainability Reporting Directive ("CSRD") requirements. The assessment analyzed the impact of Besi on people and the environment as well as the environmental and social-related risks and opportunities to which we are exposed. In addition, we significantly expanded the scale and scope of our initiatives and reporting activities against leading external frameworks. We also published a formal policy on our website this year which provides a strategic view of Besi's management activities across the ESG aspects of our business with respect to both our operations and value chain.

BESI'S ESG STRATEGIC FRAMEWORK

Our pillars	What we do	Material issues • Focus areas	Relevant SDGs
Environmental Impact	We build sustainability into our products and operations to reduce Besi's environmental footprint and those of our suppliers and customers	Impact at Besi: • Energy use and renewable energy • Carbon emissions • Waste and hazardous material use • Water use Impact at suppliers and customers: • Sustainable design	7 Affordable and clean energy 9 Industry, innovation and infrastructure 13 Climate action
People Wellbeing	We foster a diverse and inclusive culture and support the safety, development and wellbeing of our employees	• Diversity and inclusion • Employee health and safety • Employee engagement and career development	5 Gender equality 8 Decent work and economic growth
Responsible Business	We act responsibly and ethically across our value chain and seek to have a positive impact on our local communities	• Ethics and compliance • Responsible supply chain • Community impact • Tax practices	12 Responsible consumption and production 16 Peace and justice strong institutions

The Environmental Impact pillar of our ESG strategy is focused on the impact of our products, operations and supply chain on the environment and the communities in which we operate. In recent years, we have reduced the environmental impact of our production operations through programs designed to:

- Reduce our carbon emissions and increase the share of energy generated from renewable sources.
- Eliminate materials, processes and hazardous waste deemed harmful to the environment.
- Conserve natural resources such as water and electricity.
- Reduce packaging, waste, transportation and energy consumption.
- Emphasize sustainable design in new product development.

Our People Wellbeing pillar is based on three priorities: (i) diversity and inclusion, (ii) employee health and safety and (iii) employee engagement and career development. In addition, Besi strives to employ high social and ethical standards with competitive employment terms and pay scale. A high level of employee satisfaction is a basic precondition to achieve our revenue and profit growth objectives.

Our Responsible Business pillar consists of four main components: (i) ethics and compliance, (ii) responsible supply chain, (iii) community impact, and (iv) tax practices. We are committed to the UN Universal Declaration of Human Rights, adhere to ethical standards and expect the same commitment from key stakeholders, particularly across Besi's supply chain. To this end, we strive to have a positive impact on the communities and countries in which we operate via charitable activities, responsible tax practices and active engagement with our employees and suppliers.

Since 2019, Besi has significantly increased its ESG activities including the development of various short- and long-term targets through 2050. Between 2019 and 2023, we reduced Scope 1 & 2 emissions intensity by 65%, fuel consumption intensity by 46%, water usage intensity by 34%, absolute hazardous waste generation by 27% and increased our energy from renewable sources from 18% to 71%. We have also identified and commenced work on 85 initiatives associated with our ESG pillars since 2020, of which 76% have been completed. In fact, Besi met or exceeded approximately 80% of its relative ESG targets set in 2020 for achievement in 2022. In addition, we set a new objective in 2023 of reaching net zero greenhouse gas emissions in our operations by 2030, incorporating Scope 1 & 2 emissions. Moreover, our ESG ratings with the major publicly recognized agencies such as Sustainalytics, S&P Global, ISS ESG and MSCI improved significantly in 2023 further underscoring Besi's progress towards best practice metrics.

ENHANCED ESG TARGETS

2024	2030
75% renewable sources for global energy needs	100% renewable sources for global energy needs
62% reduction in Scope 1 & 2 emissions*	Carbon neutral for Scope 1 & 2 emissions*
12% reduction in Scope 3 emissions*	20% reduction in Scope 3 emissions*
Above-benchmark employee engagement	Achieve revenue objectives with lower environmental impact
Compliance with CSRD	80% vendor compliance with Conflict Free Sourcing Initiative

CARBON NEUTRAL BY 2050

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

The COVID-19 pandemic and climate change crises have also increased our focus on potential ESG impacts and our role in limiting their adverse effects on our business, employees and communities. We adapted our business model in the areas of travel, interactions and communications both within and outside the organization as a result of the pandemic, many of which lessened our ESG impact. In addition, Besi made significant investments in its Malaysian facilities in 2022 to help reduce the potential impact of climate change related events such as the flooding which caused production disruptions in the fourth quarter of 2021.

Further, we have launched several sustainable design initiatives focused on design-to-cost, quality and sustainability via the utilization of our intellectual capital. Such initiatives have been focused on upgraded versions of Besi's mainstream die bonding product lines as well as for new wafer level assembly platforms such as hybrid bonding and next generation TCB systems. We expect these activities to bring value to our customers in terms of better yield, throughput, energy conservation and efficiency, lower material consumption and total cost of ownership. In addition, we have invested in the development of more environmentally friendly products and services to help customers operate more efficiently both in terms of environmental impact and cost savings. Toward this end, we developed an initiative named "Design-to-X" this year as part of our 16-week strategic plan review. This initiative combines Design-to-Cost and Design-to-Sustainability concepts to identify ESG improvement opportunities in all product groups while reducing the cost of many mature die attach and packaging platforms.

For more information on Besi's ESG priorities, performance and targets, please refer to the Environmental, Social and Governance Report.

Acquire companies with complementary technologies and products

It is critically important to identify and incorporate new technologies on a timely and continuous basis in order to provide customers with leading edge process solutions. As a result, Besi actively identifies and evaluates acquisition candidates that can assist us in: (i) increasing process technology leadership, (ii) profitably increasing market presence in those assembly markets with the greatest long-term potential such as wafer level packaging, (iii) enhancing the productivity and efficiency of our Asian manufacturing operations and (iv) growing less cyclical, "non-system" related revenues from tooling, spares and service.

Besi has made four important acquisitions over the past three decades which have significantly expanded our advanced packaging strategy:
- RD Automation (USA) was acquired to advance Besi's product strategy into the front-end of the assembly process with the addition of flip chip capabilities.
- Laurier (USA) was acquired to add intelligent die sorting capabilities into our product range.
- Datacon (Austria) was acquired to further extend our presence in the flip chip and die bonding equipment markets and increase our customer market presence.
- Esec (Switzerland) was acquired to expand Besi's position in the mainstream die bonding market.

The successful execution and integration of such acquisitions in combination with subsequent organic growth related thereto have created a leader in the die bonding segment of the assembly equipment market.

Reward shareholders via capital allocation policy

The successful execution of Besi's strategic plan and long-term sustainable value creation model has significantly benefited shareholders. Peer-leading financial metrics have been achieved in gross, operating and net margins. Our addressable market share has also increased. In addition, Besi's capital allocation plan has resulted in the return to shareholders of € 1.9 billion since 2011 in the form of dividends and share repurchases (including the dividend proposed for 2023). Such distributions represented approximately 30% of our aggregate revenue during such period of which € 435.5 million was distributed in 2023 (up 4.6% versus 2022). Profit generation and capital allocation also resulted in a peer leading return on average equity of 33.7% in 2023 even despite a significant industry downturn. Finally, shareholders have benefited from an investment in Besi by an increase of 149.7%, 210.3% and 812.5%, respectively, over the past one, three and five years in their total stock market return (share price appreciation plus dividends). This total return significantly exceeded total returns during such periods from an investment in Besi's direct peer group of assembly equipment companies, the SOX index and Besi's remuneration reference group.

Visit of the Dutch prime minister to Besi APac, Malaysia, November 2023.

Financial Review

Financial Review

General

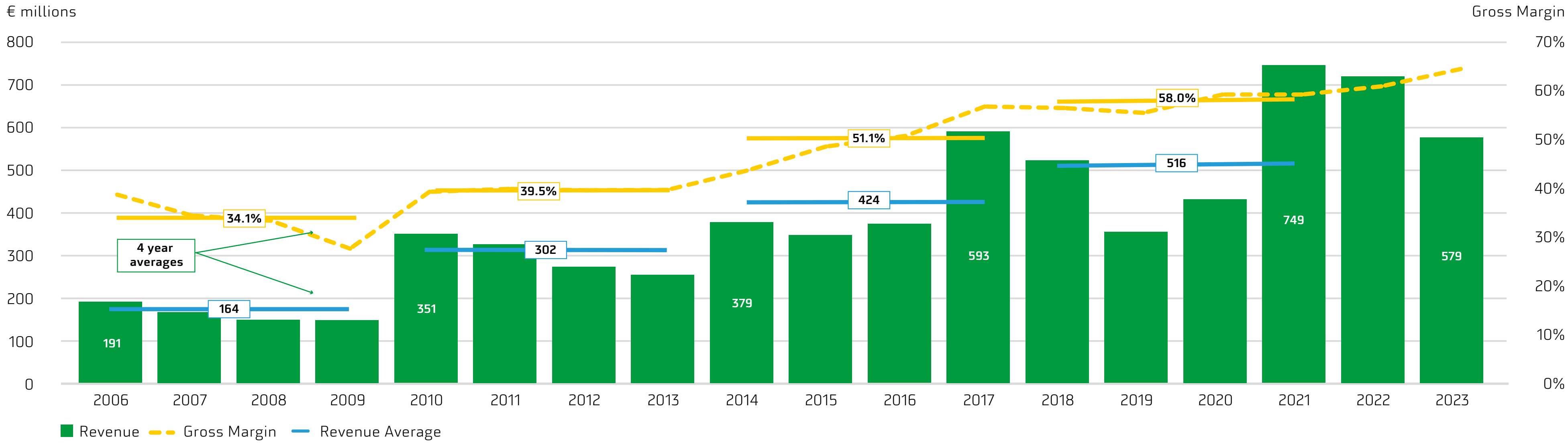
BE Semiconductor Industries N.V. ("Besi" or the "Company") is engaged in one line of business, the development, manufacturing, marketing, sales and service of semiconductor assembly equipment for the global semiconductor and electronics industries. Since we operate in one segment and in one group of similar products and services, all financial segment and product line information can be found in the Consolidated Financial Statements.

Besi's revenue and results of operations depend in significant part on the level of capital expenditures by semiconductor manufacturers, which in turn depends on the current and anticipated market demand for semiconductors and for products utilizing semiconductors. Demand for semiconductor devices and expenditures for the equipment required to assemble semiconductors is highly cyclical, depending in large part on levels of demand worldwide for mobile internet, computing, automotive and industrial end-user markets as well as the production capacity of global semiconductor manufacturers. Furthermore, a rise or fall in the sales levels of semiconductor equipment typically lags any downturn or recovery in the semiconductor market due to the lead times associated with the production of semiconductor equipment.

In recent years, Besi has experienced significant upward and downward movements in quarterly order rates due to global macroeconomic concerns, trade tensions, the COVID-19 pandemic and increased seasonality of end-user application revenue. Customer order patterns have become increasingly more seasonal due to the growing influence of more retail-oriented electronics applications in the overall demand for semiconductor devices such as smartphones, tablets, wearable devices, gaming consoles and automotive electronics. They have been characterized typically by a strong upward ramp in the first half of the year to build capacity for anticipated year end demand followed by a subsequent decline in the second half of the year as capacity additions are digested by customers. Volatile global macroeconomic conditions and seasonal influences have also contributed to the significant upward and downward movements in our quarterly and semi-annual revenue and net income.

Besi's revenue is generated primarily by shipments to the Asian manufacturing operations of leading European, North American and Asian independent device manufacturers ("IDMs") and Taiwanese, Chinese, Korean, Japanese and other Asian subcontractors. Sales to individual customers tend to vary significantly from year to year depending on global economic conditions generally and the specific capital expenditure budgets, new product

THROUGH CYCLE REVENUE AND GROSS MARGIN TRENDS



introductions, production capacity and packaging requirements of its customers. For the year ended December 31, 2023, no customer represented more than 10% of our revenue and the largest ten customers accounted for approximately 52% of revenue. In addition, we derive a substantial portion of our revenue from products that have an average selling price in excess of € 400,000 and that have lead times of approximately 4-12 weeks between the initial order and delivery of the product. Besi only recognizes orders upon receipt and acceptance of a firm purchase order. The timing and recognition of revenue from customer orders can cause significant fluctuations in operating results from quarter to quarter.

Corporate and financial structure

Besi's corporate organization consists of a Dutch holding company in which shareholders own ordinary shares and a network of wholly owned subsidiaries located globally which reflects its product group operating facilities and business activities. To get a better overview of our largest shareholders, please refer to Shareholder Information.

In general, Besi funds its operations through available cash on hand, cash generated from operations and, in some instances, funds the operations of its subsidiaries through intercompany loans and borrowings under its bank lines of credit. The working capital requirements of its subsidiaries are affected by the receipt of periodic payments on orders from its customers. Although its subsidiaries occasionally receive partial payments prior to final installation, initial payments generally do not cover a significant portion of the costs incurred in the manufacturing of such systems which requires Besi to finance its system production with internal resources and, in certain instances, via bank financing.

Currency exposure

Besi's reporting and functional currency is the euro. In 2023 and 2022, our euro-denominated revenue represented 25% and 28% of total revenue, respectively, while euro-denominated costs and expenses represented 32% and 27%, respectively. As seen in the following table, the substantial majority of Besi's revenue is denominated in US dollars while in 2023, its costs were denominated in a variety of European and Asian currencies. In 2023, 55% of our costs and expenses were denominated in Malaysian ringgit and euro. The remainder of our costs were primarily represented by the Chinese renminbi, Singapore dollar, US dollar and Swiss franc. Besi seeks to manage its exposure to currency fluctuations in part by hedging firmly committed orders denominated in US dollars and, in part, by hedging net exposures in its principal transaction currencies. Costs for hedging sales contracts and any ineffectiveness therefrom are recorded in the line item financial income (expense), net in Besi's Consolidated Statement of Operations.

			Revenue
	2023	**2022**	**2021**
US dollar	75%	72%	78%
Euro	25%	28%	22%
Total	**100%**	**100%**	**100%**

			Costs and Expenses
	2023	**2022**	**2021**
Euro	32%	27%	27%
Malaysian ringgit	23%	30%	31%
Chinese renminbi	15%	14%	13%
Singapore dollar	10%	8%	7%
US dollar	8%	10%	11%
Swiss franc	8%	8%	8%
Other	4%	3%	3%
Total	**100%**	**100%**	**100%**

Given changes in the foreign currency composition of its revenue, costs and expenses, Besi's results of operations can be affected by fluctuations in the value of, and relationships between, the euro, the US dollar, Malaysian ringgit, Swiss franc, Chinese renminbi and Singapore dollar. In 2023, our results of operations were favorably influenced primarily by a depreciation of the Chinese renminbi and the Malaysian ringgit versus the euro. Besi's costs denominated in Malaysian ringgit and Chinese renminbi can vary on an annual basis depending on the number of units produced at each location.

Quarterly results of operations

(€ millions) [1]					**2022**					**2023**
	Q1	**Q2**	**Q3**	**Q4**	**Total**	**Q1**	**Q2**	**Q3**	**Q4**	**Total**
Revenue	202.4	214.0	168.8	137.7	**722.9**	133.4	162.5	123.3	159.6	**578.9**
Orders	204.8	153.1	125.3	180.5	**663.7**	142.0	112.6	127.3	166.4	**548.3**
Net income	67.5	75.6	57.3	40.2	**240.6**	34.5	52.6	35.0	54.9	**177.1**

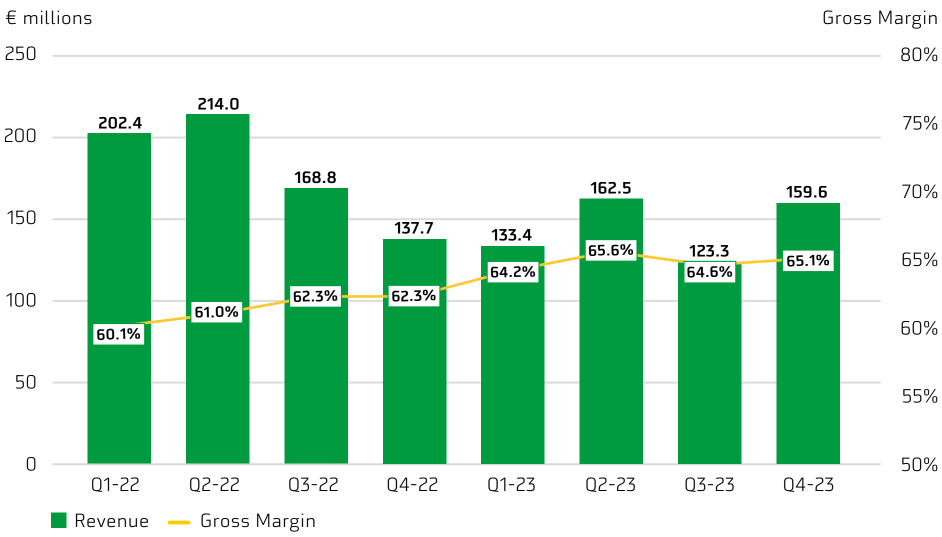
[1] Numbers may not reconcile due to rounding.

For the year, Besi's revenue and net income of € 578.9 million and € 177.1 million declined by 19.9% and 26.4%, respectively, versus 2022. Similarly, orders of € 548.3 million declined by 17.4%. Revenue weakness this year was principally due to adverse market conditions in the assembly equipment market which declined by approximately 26% as per TechInsights.

It also reflected significantly reduced demand for mainstream computing applications by both IDMs and Asian subcontractors and, to a lesser extent, reduced demand for automotive applications following strong growth over the past two years. Besi's leadership position in advanced packaging helped mitigate the adverse effects of an industry downturn as severe as the one experienced in the 2017-2019 period. Order weakness in 2023 was primarily due to decreased demand for mainstream consumer electronics and automotive applications partially offset by strong growth in the second half of the year for silicon photonics, hybrid bonding and 2.5D logic/memory applications.

Besi achieved peer-leading operating and net margins of 36.9% and 30.6% in 2023 as we successfully aligned our operating model to difficult market realities. In fact, gross margins increased to 64.9% versus 61.3% in 2022 due to successful new product introductions, supported by a keen focus on cost control efforts, effective supply chain management and net forex benefits. Elevated operating margins were maintained despite increased development spending to support the expansion of our advanced packaging product portfolio for the next market upcycle.

QUARTERLY REVENUE AND GROSS MARGIN TRENDS



2023 compared to 2022

Set forth below is a summary of our key income statement highlights for 2023 versus 2022:

(€ millions, except %)[1]	Year ended December 31, 2023	% revenue	2022	% revenue	Change 2023/2022 % points
Revenue	578.9	100.0%	722.9	100.0%	-
Cost of sales	203.1	35.1%	279.8	38.7%	(3.6)
Gross profit	**375.8**	**64.9%**	**443.1**	**61.3%**	**3.6**
SG&A expenses	106.0	18.3%	95.0	13.1%	5.2
R&D expenses	56.4	9.7%	53.9	7.5%	2.2
Total operating expenses	**162.4**	**28.1%**	**149.0**	**20.6%**	**7.5**
Operating income	**213.4**	**36.9%**	**294.1**	**40.7%**	**(3.8)**
Financial expense, net	5.7	1.0%	18.6	2.6%	(1.6)
Income before income taxes	**207.7**	**35.9%**	**275.5**	**38.1%**	**(2.2)**
Income taxes	30.6	5.3%	34.8	4.8%	0.5
Net income	**177.1**	**30.6%**	**240.6**	**33.3%**	**(2.7)**
Effective tax rate	14.7%[2]		12.6%		

[1] Numbers may not reconcile due to rounding.

[2] Effective tax rate in 2023 was 13.6%, excluding € 2.3 million downward valuation of deferred tax assets.

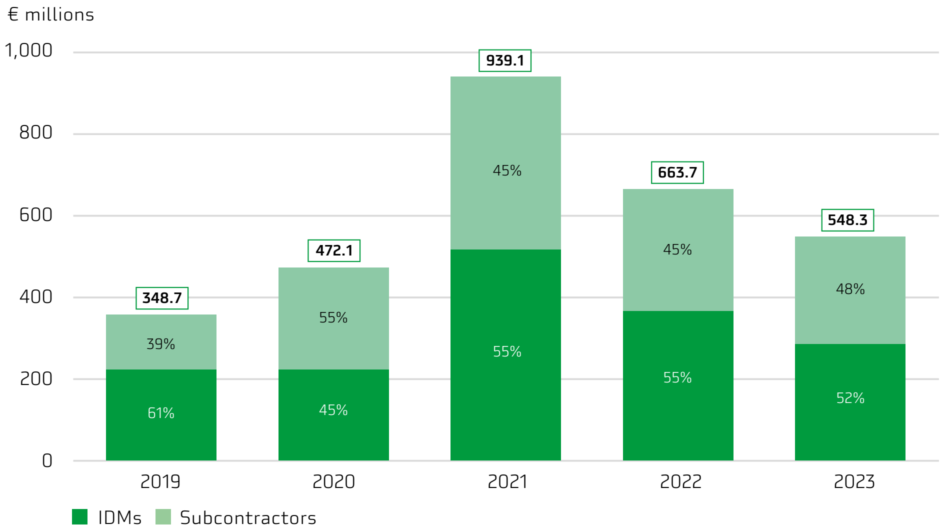
Revenue/Orders

(€ millions)	Year ended December 31, 2023	2022	% Change 2023/2022
Revenue	578.9	722.9	(19.9%)
Orders	548.3	663.7	(17.4%)
IDM	286.5	363.2	(21.1%)
Subcontractors	261.8	300.5	(12.9%)

Besi's revenue of € 578.9 million in 2023 declined by € 144.0 million, or 19.9%, versus 2022. The revenue decrease was principally due to adverse market conditions as well as significantly reduced demand for mainstream computing applications by both IDMs and Asian subcontractors. To a lesser extent, it also reflected reduced demand for automotive applications following strong growth over the past two years. Besi's orders of

€ 548.3 million decreased by 17.4% versus 2022 due primarily to decreased demand for mainstream consumer electronics and automotive applications partially offset by strong growth in the second half of the year for silicon photonics, hybrid bonding and 2.5D logic/memory applications as customers began to significantly build out their generative AI and high-performance computing capacity. In particular, hybrid bonding orders and year end backlog approximately doubled versus comparable levels of the prior year. In addition, bookings by IDMs and subcontractors represented approximately 52% and 48%, respectively, of total orders versus 55% and 45%, respectively, in 2022. Revenue and orders in 2023 were not adversely affected by trade restrictions and regulations resulting from geo-political tensions.

ORDER TRENDS



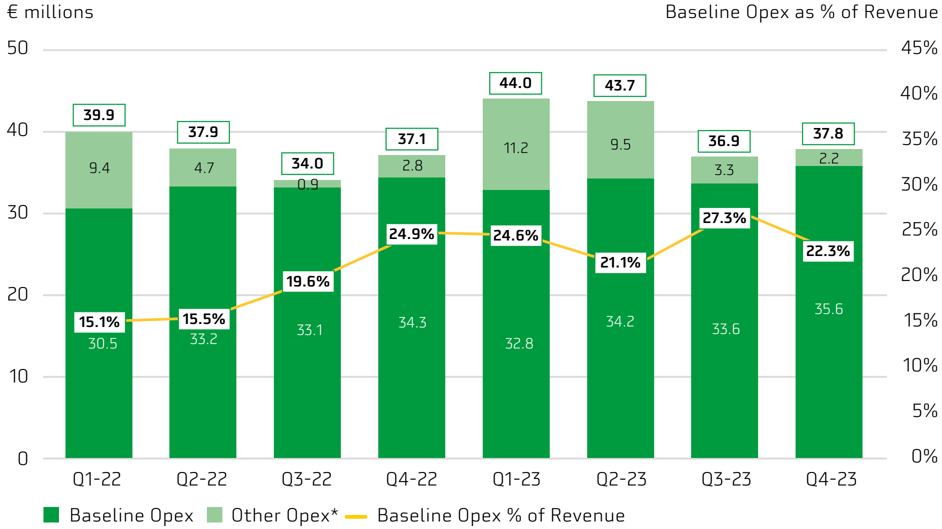
Gross profit

Gross profit declined by € 67.3 million, or 15.2%, versus 2022 due to lower revenues, partially offset by improved gross margin efficiency. Besi's gross margin increased 3.6 points to reach 64.9%, despite adverse market conditions, due primarily to (i) successful new product introductions, (ii) effective and timely management of our costs and supply chain activities, (iii) a more favorable product mix and (iv) forex benefits mainly from the devaluation of Asian currencies versus the euro and US dollar. In addition, Besi was able to implement price increases for its systems to help offset labor and material cost inflation.

Selling, general and administrative expenses

Total SG&A expenses increased by € 11.0 million, or 11.6%, versus 2022. The increase was due primarily to (i) € 3.8 million increased share-based compensation expense, (ii) € 3.3 million expenses related to Besi's strategic plan review as well as (iii) additional marketing, technical support, and personnel necessary to support the growth of Besi's wafer level assembly portfolio. As a percentage of revenue, SG&A expenses increased from 13.1% in 2022 to 18.3% in 2023.

QUARTERLY OPERATING EXPENSE TRENDS



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

Research and development expenses

Besi's R&D spending is primarily focused on advancing its leadership position in advanced assembly process technology and upgrades to its product portfolio on a regular basis. Spending can vary from year to year depending on specific customer roadmaps and the timing of new device introductions. The components of research and development expenses for the years ended December 31, 2023 and 2022, were as follows:

(€ millions)	Year ended December 31, 2023	2022
Research and development expenses, gross	63.9	63.8
Amortization of capitalized development expenses	13.6	11.7
Capitalization of development expenses	(21.1)	(21.6)
Research and development expenses as reported	**56.4**	**53.9**

In 2023, R&D expenses of € 56.4 million increased by € 2.5 million, or 4.6%, versus 2022, due primarily to increased amortization of capitalized development costs primarily related to new product introductions. As a percentage of revenue, R&D expenses increased to 9.7% in 2023 versus 7.5% in 2022. Gross R&D expenses (excluding the impact of R&D capitalization and amortization) were € 63.9 million, or 11.0% of revenue, and were roughly equivalent to 2022 levels.

Operating income

Operating income of € 213.4 million declined by 27.4% versus 2022 principally due to Besi's 19.9% revenue decrease and a 9.0% increase in operating expenses partially offset by gross margin improvement of 3.6 points. As a result, Besi's operating margin declined from 40.7% to 36.9%.

Financial expense, net

The components of financial expense, net, for the years ended December 31, 2023 and 2022, were as follows:

(€ millions)	Year ended December 31, 2023	2022
Interest income	12.3	1.6
Interest expense	(11.7)	(12.1)
Interest income (expense), net	**0.6**	**(10.5)**
Net cost of hedging	(7.1)	(7.6)
Net foreign exchange effects	0.8	(0.5)
Financial income (expense), net	**(5.7)**	**(18.6)**

Besi's net financial expense of € 5.7 million improved by € 12.9 million compared to 2022 primarily due to increased interest income on our cash balances outstanding. Exposure to changes in interest rates on our external funding is limited given the fixed interest rates on Besi's Convertible Notes outstanding which represent substantially all of its current debt outstanding.

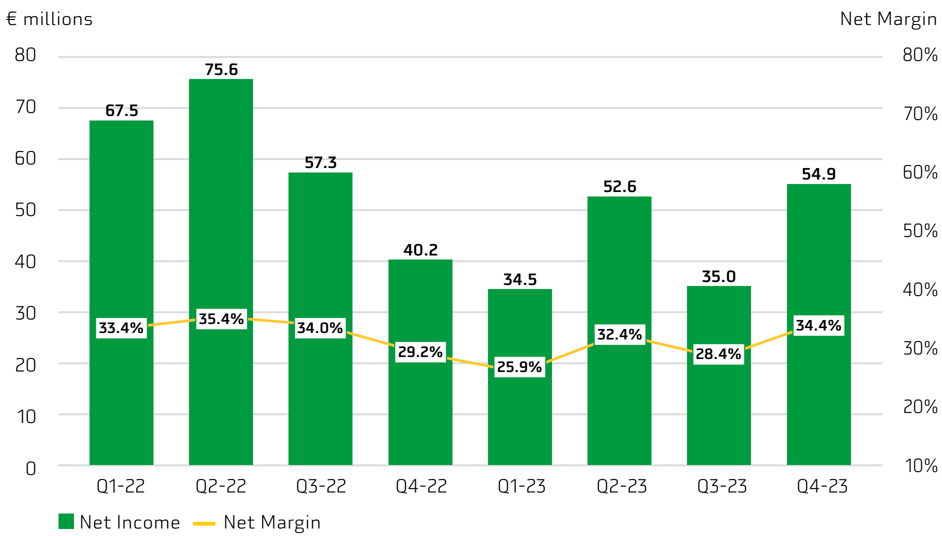
Income taxes

Besi recorded income tax expense of € 30.6 million in 2023 versus € 34.8 million in 2022. The effective tax rate increased to 14.7% versus 12.6% in 2022 primarily due to a € 2.3 million downward valuation of tax assets. Excluding such adjustment, Besi's effective tax rate for 2023 would have been 13.6%.

Net income

Besi's net income of € 177.1 million in 2023 decreased by 26.4% versus 2022 and its net margin decreased from 33.3% to 30.6% primarily due to lower revenue and higher operating expenses, partially offset by improved gross margins and increased interest income on cash balances outstanding.

QUARTERLY NET INCOME TRENDS



Balance sheet, cash flow development and financing

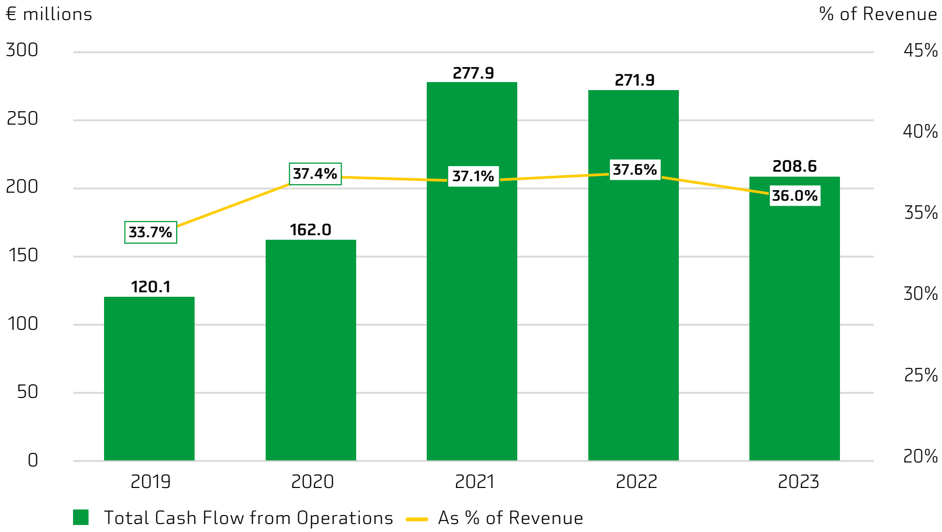
Cash flow

In 2023, Besi generated cash flow from operations of € 208.6 million which along with cash, cash equivalents and deposits outstanding, was utilized for the following principal purposes:

- € 222.1 million of cash dividends were paid to shareholders.
- € 213.4 million of ordinary shares were repurchased and held in treasury.
- € 21.1 million of development expenses were capitalized.
- € 6.9 million of capital expenditures were made.

As a result, Besi's cash and deposits decreased by € 258.2 million to reach € 413.5 million at December 31, 2023. Year end cash balances reflected a total capital allocation of € 435.5 million in the form of dividends and share repurchases. Similarly, Besi's year end net cash position of € 113.0 million (defined as cash, cash equivalents and deposits less total debt) decreased by € 233.5 million versus year end 2022 which also included the conversion into equity of € 31.7 million of our 2016 and 2017 Convertible Notes.

CASH FLOW GENERATION TRENDS



Working capital

Besi's working capital (excluding cash and debt) increased by € 17.2 million, or 13.9%, to reach € 140.7 million at December 31, 2023, due primarily to an increase in other receivables and a decrease in other payables. As a percentage of revenue, working capital increased to 24.3% at year end 2023 versus 17.1% at year end 2022.

Capital expenditures

Capital expenditures of € 6.9 million were roughly equivalent to 2022 levels. Capital spending in 2023 primarily related to the completion of Besi's Singapore cleanroom facility and the establishment of a new assembly facility in Vietnam. We anticipate that capital expenditures will range between € 8 and € 12 million in 2024 primarily related to increased purchases of process equipment for our Centers of Excellence in Austria and Singapore and our tooling and support facility in Vietnam.

Financing

At December 31, 2023, Besi had € 300.5 million of total indebtedness of which € 298.5 million related to three issues of Convertible Notes outstanding with a face value of € 328.2 million and € 2.0 million of government loans. No other indebtedness was outstanding at such date including amounts owed under Besi's bank lines of credit.

Bank lines of credit

At December 31, 2023, Besi and its subsidiaries had available bank lines of credit aggregating € 97.7 million. At such date, utilization under the lines aggregated € 1.1 million related to bank guarantees. In general, interest is charged at the banks' base lending rates or ESTR/SOFR plus an increment. Most credit facility agreements include covenants requiring Besi and/or its subsidiaries to maintain certain financial levels or financial ratios. Besi and all its applicable subsidiaries were in compliance with all loan covenants at December 31, 2023.

The lines of credit include an € 80 million revolving credit facility with a consortium of European banks (the "Facility"), which matures in 2026 and can be expanded to € 136 million. Interest rates on borrowings vary per currency and the level of cash balances outstanding and borrowings utilized. It ranks pari passu with the Convertible Notes and is secured by guarantees from certain operating subsidiaries. Borrowings can be repaid at any time at 100% of principal amount and used for working capital and other corporate purposes. The principal covenants associated with the Facility include a maintenance test of consolidated debt to equity and a limitation on the incurrence of additional permitted indebtedness.

Donation to Children's Cancer Aid Tyrol by Besi Austria and its employees.

Issuance of Convertible Notes

On December 2, 2016, Besi issued € 125 million principal amount of 2.5% Senior Unsecured Convertible Notes due December 2023 (the "2016 Convertible Notes"). In 2023, the remaining outstanding principal balance of € 2.4 million was converted into approximately 130,000 shares.

On December 6, 2017, Besi issued € 175 million principal amount of 0.5% Senior Unsecured Convertible Notes due December 2024 (the "2017 Convertible Notes). The 2017 Convertible Notes will be repaid at maturity at 100% of their principal amount plus accrued and unpaid interest or, if converted, into ordinary shares at a conversion price of € 45.75 (subject to adjustment). The original exercise price of € 99.74 has been adjusted for the two-for-one stock split effective May 4, 2018 and dividends paid subsequent to the date of issuance in accordance with the terms and conditions related thereto. In 2023, € 29.3 million principal amount of the 2017 Convertible Notes were converted into approximately 0.6 million ordinary shares. As a result, the principal amount outstanding declined to € 3.2 million at year end 2023 representing approximately 70,000 shares still available for conversion.

On August 5, 2020, Besi issued € 150 million principal amount of 0.75% Senior Unsecured Convertible Notes due August 2027 (the "2020 Convertible Notes"). The 2020 Convertible Notes will be repaid at maturity at 100% of their principal amount plus accrued and unpaid interest or, if converted, into approximately 3.1 million ordinary shares at a conversion price of € 48.95 (subject to adjustment). The original exercise price of € 51.56 has been adjusted for dividends paid subsequent to the date of issuance in accordance with the terms and conditions related thereto.

On April 6, 2022, Besi issued € 175 million principal amount of 1.875% Senior Unsecured Convertible Notes due April 2029 (the "2022 Convertible Notes"). The 2022 Convertible Notes will be repaid at maturity at 100% of their principal amount plus accrued and unpaid interest or, if converted, into approximately 1.5 million ordinary shares at a conversion price of € 115.50 (subject to adjustment).

Besi may redeem each of the outstanding 2017, 2020 and 2022 Convertible Notes at 100% of their principal amount after December 27, 2021 (2017 Convertible Notes), August 26, 2024 (2020 Convertible Notes) and April 27, 2026 (2022 Convertible Notes), respectively, provided that the market value of its ordinary shares exceeds 130% of the then effective conversion price for a specified period of time. In the event of a change of control (as defined), each noteholder will have the right to require Besi to redeem all (but not less than all) of its Convertible Notes at 100% of their principal amount together with accrued and unpaid interest thereon. In addition, the 2020 and 2022 Convertible Notes may be redeemed at the option of the holder on August 5, 2025 and April 6, 2027, respectively, at their principal amount plus accrued interest.

The terms and conditions governing each of the Convertible Notes contain no incurrence tests nor maintenance covenants which could materially limit Besi's ability to conduct its operations in the normal course. The Convertible Notes were privately offered to institutional investors and are listed on the Deutsche Börse's Freiverkehr market.

Capital allocation

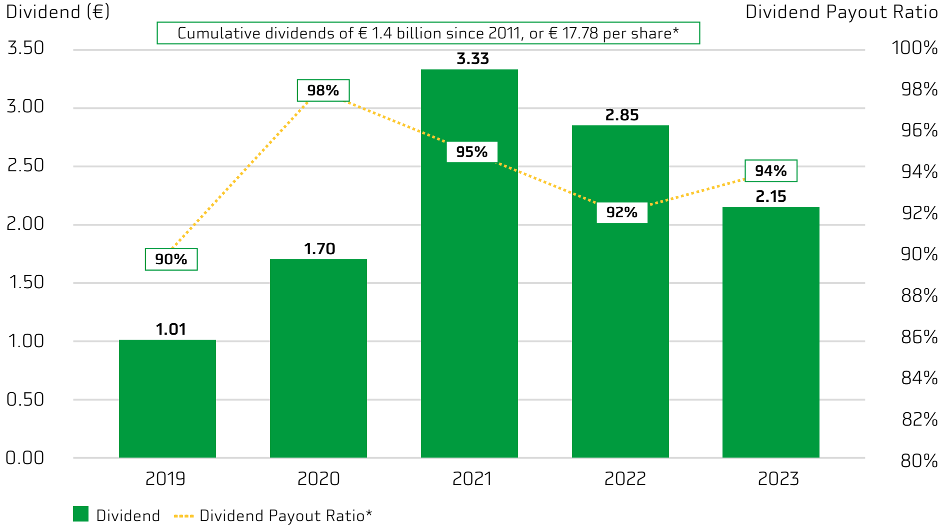
Besi's capital allocation policy seeks to provide a current return to shareholders in the form of cash dividends and share repurchases while retaining a capital base sufficient to fund future growth opportunities.

Dividends

Besi's dividend policy considers the payment of dividends on an annual basis based upon (i) a review of its annual and prospective financial performance, liquidity and financing needs, the prevailing market outlook and Besi's strategy, market position and acquisition strategy and/or (ii) a dividend payout ratio in the range of 40-100% relative to net income to be adjusted accordingly if the factors referred to under (i) so require.

Due to Besi's earnings and cash flow generation in 2022, the Board of Management proposed and Besi paid a cash dividend to shareholders of € 2.85 per share which resulted in cash payments to shareholders of € 222.1 million.

DIVIDEND TRENDS



* Calculated on Basic EPS. Includes value of both cash and stock dividends. Includes proposed dividend for approval at 2024 AGM.

Due to Besi's earnings and cash flow generation in 2023, the Board of Management will propose a cash dividend to shareholders of € 2.15 per share for approval at Besi's Annual General Meeting of Shareholders to be held on April 25, 2024.

The payments for the year 2022 and proposed for the year 2023 represent a dividend payout ratio relative to net income of 92% and 94%, respectively, based on the number of outstanding shares at year end 2023.

Share repurchase program

On July 21, 2022, Besi announced a € 300 million share repurchase program effective August 1, 2022. The program was completed in October 2023. Under the program, a total of 4.3 million shares were repurchased between August 1, 2022 (inception) and October 27, 2023 (completion) at an average price per share of € 69.87.

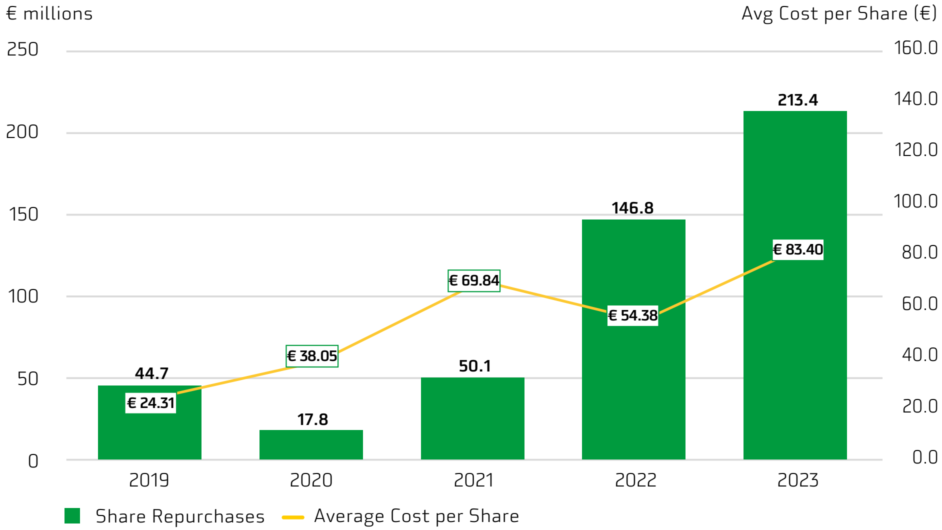
On October 26, 2023, Besi announced a new € 60 million share repurchase program effective November 1, 2023. The program is aimed at general capital reduction purposes and to help offset dilution related to Besi's Convertible Notes and shares issued under employee stock plans. It is funded using Besi's available cash resources and expected to be completed by October 2024.

In 2023, Besi repurchased a total of approximately 2.6 million of its ordinary shares at an average price of € 83.40, representing an aggregate amount of € 213.4 million.

At present, Besi has shareholder authorization to repurchase up to 10% of its issued share capital (approximately 8.1 million shares) until October 26, 2024. At December 31, 2023, Besi held approximately 4.1 million shares in treasury equal to approximately 5.1% of its ordinary shares outstanding.

Besi believes that its cash position, internally generated funds and available lines of credit will be adequate to meet its anticipated levels of capital spending, research and development, debt service requirements, working capital and capital allocation policy for at least the next twelve months.

SHARE REPURCHASE ACTIVITY



Environmental, Social and Governance Report

Environmental, Social and Governance Report

This Environmental, Social and Governance ("ESG") Report provides an overview of Besi's ESG activities in 2023 including a discussion of the following topics:
- Overview
- Materiality assessment
- Strategy
- Initiatives
- Governance
- Reporting framework
- Environmental impact
- People wellbeing
- Responsible business

A year of progress

Besi has significantly increased its ESG activities and reporting since 2020 including the development of various short- and long-term targets through 2050. Since 2019, we have reduced Scope 1 & 2 emissions intensity by 65%, fuel consumption intensity by 46%, water usage intensity by 34% and absolute hazardous waste generation by 27%. We also increased our energy from renewable sources from 18% to 71%. We have also identified and commenced work on 85 initiatives associated with our ESG pillars (Environmental Impact, People Wellbeing and Responsible Business) many of which have lessened Besi's ESG impact. In fact, we equaled or exceeded substantially all targets for 2022 set in 2019 and set new targets in 2022 for achievement in 2024 and 2030 using 2021 data as a baseline. In addition, in 2023 we set an objective of reaching net zero greenhouse gas emissions in our operations by 2030, incorporating Scope 1 & 2 emissions.

In general, we measure our ESG performance in terms of relative intensity targets given the highly cyclical nature of our revenue development on a year to year or even multi-year basis. Of note, Besi's performance with respect to most relative intensity targets in 2023 was adversely affected by two important factors. The first related to the spike we experienced in our electricity consumption, Scope 2 emissions and waste disposal in the second and third quarters of 2023 associated with the construction of a new production facility in Malaysia and the completion of two new cleanrooms in Malaysia and Singapore to facilitate growth in Besi's wafer level assembly operations. The second factor related directly to the cyclical revenue volatility of the semiconductor assembly equipment market in which we participate. This market experienced a significant downturn in demand starting in the second quarter of 2022 and continued through year end 2023. As a result, Besi's revenue declined from a peak of € 749 million in 2021 to € 579 million in 2023. As a result of both such factors, all relative intensity ratios and some performance metrics were adversely affected this year versus 2022 actual results and 2024 targets. Relative intensity ratios began to significantly improve in Q4-23 upon the substantial completion of such projects and further migration to renewable energy in Asia. We are currently on track to meet or exceed substantially all environmental targets established for 2024.

Since 2019, Besi has significantly expanded the scale and scope of its initiatives and reporting activities relative to leading external frameworks such as SASB, GRI, SDG, NFRD, TCFD and the EU Taxonomy. We have also proactively responded to external questionnaires such as CDP Climate Change and the S&P Global Corporate Sustainability Assessment, with a focus on materiality, clarity and transparency. In 2020 and 2021, we identified 12 material topics most relevant to our business, established three material ESG pillars and engaged in a four-stage materiality assessment. This framework was applied for our 2023 report. In addition, we conducted a Double Materiality Assessment as a precondition to compliance in 2024 with Corporate Sustainability Reporting Directive ("CSRD") requirements, assessing the impact of Besi on people and the environment as well as the environmental and social-related risks and opportunities to which we are exposed. The results of the analysis will be used to further validate our current approach to ESG-related topics, make any necessary adjustments to our ESG strategy and comply with the CSRD's European Sustainability Reporting Standards ("ESRS") in 2024. We also published a formal policy on our website this year which provides a strategic view of Besi's management activities across the ESG aspects of our business. In addition, Ernst & Young Accountants LLP provided reasonable assurance on our materiality assessment and limited assurance on the Environmental, Social and Governance Report included in this Annual Report. Their assurance report is included in Other Information.

In addition, our ESG ratings with the major publicly recognized agencies such as Sustainalytics, S&P Global, ISS ESG and MSCI improved significantly in 2023, further underscoring Besi's progress towards best practice metrics. More specifically, we achieved a rating of "AA" in the updated 2023 MSCI ESG Ratings Assessment, up from "A" in 2022 and "BBB" in 2021. Further, in November 2023, Besi's ESG Risk Rating declined to 14.4 as per Sustainalytics versus 17.8 in 2021 highlighting long-term trend improvement. We also were selected for inclusion as a component of the AEX ESG Index in 2022. Such index identifies the 25 companies within the combined AEX (large cap) and AMX (mid cap) indices demonstrating best in class ESG practices as per criteria assessed by Sustainalytics.

Further, progress continues to advance Besi's sustainable product design as a core component of our sustainable long-term value creation model. As such, we seek to design leading edge assembly solutions with high levels of reliability, yield of defect free devices and throughput with a lower total cost of ownership including efficiencies in energy and material consumption. Toward this end, we developed an initiative named "Design-to-X" this year as part of our strategic plan review which included input from our leading customers and other stakeholders. This initiative combines Design-to-Cost and Design-to-Sustainability concepts to identify ESG improvement opportunities in all product groups while reducing the cost of many mature die attach and packaging platforms. It is in its early stages and builds upon the environmentally friendly product design enhancements identified in a collaborative project with the University of Applied Sciences and Arts (Lucerne, Switzerland) ("UASA") over the past three years. The UASA collaboration led to the creation of roadmaps with the potential to achieve absolute energy savings of approximately 10% per die attach platform over the next five years. Such potential savings are material as die attach revenue represented approximately 77% of Besi's total revenue in 2023. Growth in Besi's installed base of hybrid bonding and other wafer level systems also contributes to sustainable product design via an improvement in the overall performance, speed, efficiency, cost and energy efficiency of such systems versus those using leadframe and substrate assembly technologies.

In addition, we made considerable progress this year with employee and supplier engagement with Besi's ESG goals and objectives. Many of the defined goals, ambitions, and activities we have promoted with such stakeholders since 2019 have been implemented and well received by our organization. The results of our bi-annual Employee Engagement survey conducted by Willis Towers Watson in 2023 further highlighted this progress. In general, Besi scored above the high-tech norm in six of seven categories in this year's survey. Specifically, the survey had a high level of participation (94%) and engagement (89%) by our employees. The engagement levels were five percentage points higher than the sector's benchmark. The survey results also indicated a high level of satisfaction with our ESG credentials due to a high level of favorable responses to ESG category questions (87%). This component scored four percentage points higher than the sector benchmark and was our most improved category this year.

Besi also saw increased supply chain participation with respect to ESG topics via an enhanced Besi ESG survey. In this regard, we conducted vendor site visits and stakeholder interviews and circulated questionnaires at their principal Asian production facilities to ensure that our suppliers as well as temporary and contracted third-party workers adhered to the standards outlined in Besi's Supplier Code of Conduct. We also engaged with our supply chain through an ESG briefing roadshow, training sessions and the sharing of ESG-related knowledge. In addition, Besi conducted an ESG assessment survey that focused on Besi's pillars of Environmental Impact, People Wellbeing and Responsible Business. Fifty-five suppliers were sent this assessment survey with a response received from forty-six (84%), representing approximately 50% of our total purchasing volume. Such responses were used to create a grading system of either Low Risk, Medium Risk or High Risk. Moving forward, Besi will incorporate this ESG scorecard into its periodic audit for annual suppliers. Finally, the percentage of purchasing volume which answered the RBA Code of Conduct Self-Assessment increased from 62% in 2022 to 66% 2023 marking further progress in our supply chain engagement with Besi's ESG activities.

Besi Austria employees participated in the Wings for Life World Run 2023.

Materiality assessment

In 2020, Besi's management team identified 12 ESG topics most material to our business. Such topics formed the basis of our ESG approach and foundation of three strategic pillars: Environmental Impact, People Wellbeing and Responsible Business. In 2021, we conducted a full assessment of the material topics identified in 2020 by engaging in a four-stage materiality assessment involving an industry trend analysis (including consideration of SASB standards for the semiconductor industry), peer group benchmarking, key investor research and broader stakeholder outreach including employees, customers and suppliers. The assessment served to substantiate Besi's current strategy and understanding of material topics with the collaboration of key stakeholder groups to validate their areas of interest. In addition, the perspective of investors as a key stakeholder was captured in the research phase and factored into the final assessment. The assessment highlighted a variety of important themes that can have the most significant positive impact in the near-term of which we prioritized four focus areas, (i) energy use and renewable energy, (ii) sustainable design (iii) health and safety and (iv) diversity and inclusion.

In 2023, Besi reviewed its 2021 materiality assessment and concluded that the material topics identified were still valid. As a result, the same reporting framework was applied to ESG reporting for 2023. Besi recognizes increased interest expressed by stakeholders to report information as to their dependence on biodiversity and ecosystems. As a result, these topics were included within our materiality assessment. We also began conducting a Double Materiality Assessment in 2023 according to CSRD requirements as a precondition to full compliance by year end 2024. Updated results of this assessment will be included in Besi's 2024 Annual Report.

Based on the aforementioned materiality assessment performed in 2021 and reviewed in 2023, the ranking of topics of importance per stakeholder group is listed below for each of Besi's three process pillars: Environmental Impact, People Wellbeing and Responsible Business:

Strategic Pillars	Material topics Employees	Customers	Suppliers
1. Environmental Impact	1. Energy use and renewable energy 2. Carbon emissions 3. Sustainable design 4. Waste and hazardous waste disposal 5. Water use	1. Sustainable design 1. Energy use and renewable energy 1. Waste and hazardous waste disposal 4. Carbon emissions 5. Water use	1. Waste and hazardous waste disposal 2. Carbon emissions 3. Energy use and renewable energy 4. Sustainable design 5. Water use
2. People Wellbeing	1. Employee health and safety 2. Employee engagement 3. Diversity and inclusion	1. Employee health and safety 2. Diversity and inclusion 3. Employee engagement	1. Employee health and safety 2. Employee engagement 3. Diversity and inclusion
3. Responsible Business	1. Ethics and compliance 2. Responsible supply chain 3. Community impact 4. Tax practices	1. Ethics and compliance 2. Responsible supply chain 3. Tax practices 4. Community impact	1. Ethics and compliance 2. Responsible supply chain 3. Community impact 4. Tax practices

● Priority focus area

Strategic pillars	Material topics	2024 targets*				2030 targets*				Relevant SDGs
Environmental Impact	● **Energy use and renewable energy**	**15%** Reduction in fuel consumption	**11%** Increase in electricity	**75%** Renewable energy globally		**25%** Reduction in fuel consumption	**25%** Increase in electricity	**100%** Renewable energy globally		7 Affordable and clean energy
	Carbon emissions	**62%** Reduction in Scope 1 & 2 carbon emissions	**12%** Reduction in Scope 3 carbon emissions			**Net zero** Scope 1 & 2 emissions	**20%** Reduction in Scope 3 carbon emissions			9 Industry, innovation and infrastructure
	Waste and hazardous waste disposal	**15%** Reduction in total waste	**20%** Reduction in hazardous waste			**18%** Reduction in total waste	**20%** Reduction in hazardous waste			12 Responsible consumption and production
	Water use	**2%** Reduction in water consumption				**5%** Reduction in water consumption				13 Climate action
	● **Sustainable design**	Develop priority targets for sustainable system design				Achieve priority targets for sustainable system design				
People Wellbeing	● **Diversity and inclusion**	Increase % female employees in workforce to **≥19%**	Increase % female employees in management to **≥21%**	Maintain % local nationals in management **≥86%**		Increase % female employees in workforce to **≥20%**	Increase % female employees in management to **≥23%**	Maintain % local nationals in management **≥86%**		3 Good health and well-being
	● **Employee health and safety**	Safety incident record of **0**								5 Gender equality
	Employee engagement and career development	Maintain employee engagement **≥85%**	Remain above high-tech benchmark	Increase investment in employee training to **≥21** working hours per employee per year		Maintain employee engagement **≥85%**	Remain above high-tech benchmark	Increase investment in employee training to **≥21** working hours per employee per year		8 Decent work and economic growth
Responsible Business	**Ethics and compliance**	Whistleblower procedure in place. Prompt response to violations by Besi senior management								16 Peace and justice strong institutions
	Responsible supply chain	**70%** Purchasing Volume ("PV") audited	**75%** PV to sign Self Assessment Questionnaire in our Code of Conduct	**77%** PV to sign General Work Agreement or General Procurement Contract	**73%** PV to sign Conflict-Free Sourcing Initiative	**75%** PV audited	**85%** PV to sign Self Assessment Questionnaire in our Code of Conduct	**85%** PV to sign General Work Agreement or General Procurement Contract	**80%** PV to sign Conflict-Free Sourcing Initiative	
	Community impact	Report on Besi hours volunteered, monetary donations and education projects supported								
	Tax practices	Comprehensive compliance with tax obligations where factual economic activities take place								

* All targets are based on estimated reductions relative to 2021 baseline levels.

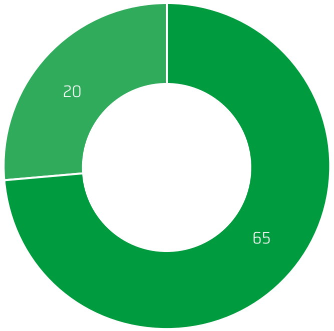
ESG Strategy

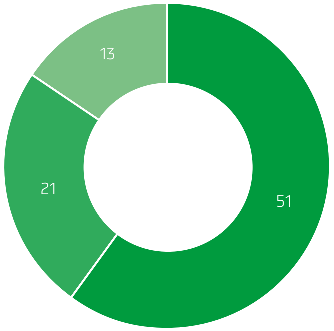
Within our three strategic pillars, Besi's ESG strategy has identified twelve material topics and formalized a range of short and long-term targets against which we have committed to report. Besi follows the objectives of the UN Sustainable Development Goals ("SDGs") in such reporting whose 17 interlinked goals are designed to be a blueprint for achievement by 2030 of a better and more sustainable future. SDG objectives help inform our thinking and approach to sustainable business growth. We have aligned the SDGs to which we can make the greatest contribution with our strategic pillars.

ESG initiatives

Since 2020, we increased the number of Besi's ESG initiatives from 75 to 85 at year end 2023 (up 13%). Of the total initiatives identified, 65 have been completed and 20 are ongoing or scheduled to be implemented over the next few years. The charts below indicate the distribution of ESG initiatives per major pillar and Besi's progress against such initiatives.

ESG topics and initiatives are widely supported by Besi employees at all levels of the organization including management, development personnel and production staff.





Initiatives implemented during 2023 include:

Environmental Impact:
- All business units
  - Inception of Design-to-X initiative to incorporate Design-to-Cost and Design-to-Sustainability concepts in product design and development.
- Besi APac
  - Reduced shipments from Besi Netherlands to Besi APac to once a week versus twice a week.
  - Purchase of renewable electricity at new Glenmarie, Malaysia site.
- Besi Netherlands
  - Increased lighting energy efficiency at our Meco facility.
  - Installation of smart meters at Meco facility to improve energy management.
  - Completion of wastewater treatment project with Copernicus Institute, Utrecht, the Netherlands, to measure ecological footprint of Besi's plating systems.
  - Reduction of paper waste through sustainable procurement initiative with 70% of total waste now recycled at this site.
- Besi Austria
  - Expansion of existing solar PV system to reduce energy consumption.
  - Installation of groundwater heat pump to replace gas usage.
- Besi Switzerland
  - Implementation of joint project with UASA Switzerland, which identified potential energy savings for die attach platforms of approximately 10%.
  - Expansion of LED lighting system.
- Besi Leshan
  - Installation of centrifuge to reduce water consumption via recycling.
  - Purchase of EV vehicles to replace ICE vehicles.
  - Installed EV charging points for corporate and employee use.

People Wellbeing
- Six of seven Besi operations are now ISO 45001 compliant. Besi Leshan received external validation in 2023.
- Active engagement in diversity-related recruitment programs.
- Bi-annual employee engagement survey:
  - Survey indicated that employees feel safe in their current physical working environment, there is effective collaboration between departments to meet customer needs and a strong feeling of trust exists between team members.
  - Employees also had a strong understanding and motivation to contribute to Besi's business and ESG objectives.
  - Results will be used to improve areas in which we under-performed.

Responsible Business
- Conducted ESG assessment survey with suppliers focused on Environmental Impact, People Wellbeing and Responsible Business pillars.
- Fifty-five suppliers were engaged with a response rate of 84% representing approximately 50% of total purchasing volume.
- Continued annual third-party external supplier audits for all significant production and development facilities with respect to their ISO 9001, ISO 14001, ISO 45001 and RBA capabilities.
- Supported activities and charities in our local communities, particularly in Malaysia, China, Switzerland, the Netherlands and Austria.

ESG topics and initiatives are widely supported by Besi employees at all levels of the organization including management, development personnel and production staff.

ESG governance

Besi's ESG focus and strategic initiatives are integrated into its operations. The Board of Management is responsible for setting our ESG strategy and targets as well as its implementation and execution. The Supervisory Board has oversight responsibility for Besi's ESG strategy. In addition, ESG issues are assessed monthly by the management team including resource allocation and capital investment.

As such, Besi's ESG governance and approach is fully aligned with its hierarchal structure. SVPs and facility management monitor and track progress against ESG-related goals. Progress is then reported to the Board of Management and discussed in detail at Besi's monthly management meeting. Incentives for all such employees are aligned with performance against certain specific ESG targets which forms a portion of their variable compensation. The Supervisory Board is updated by the Board of Management as to Besi's progress on a quarterly basis.

All of Besi's production sites have environmental, health and safety ("EHS") officers and committees and a health and safety management structure. These committees have representatives from each department responsible for the inspection, enforcement and promotion of EHS matters in the workplace. EHS inspections are conducted quarterly to identify and address any unsafe acts and conditions which may exist. Employees also regularly receive EHS training. In addition, we have implemented externally certified ISO 9001 and ISO 14001 management systems to manage quality and environmental topics as well as health and safety topics in our operations. Six of seven Besi product operations have received ISO 45001 certificates of approval for their occupational health and safety management systems with all expected to have received such certification by the end of 2024.

ESG reporting framework

Reporting scope

The data in this ESG report covers all entities that belong to the scope of the Consolidated Financial Statements (see Note 2 to the Consolidated Financial Statements, section "Principles of consolidation") excluding the following "Environmental Impact" data:
- Energy data for four and water data for seven sales and service offices due to their immaterial significance.
- Energy, emission, water and waste-related data for our operations in Vietnam due to their immaterial significance this year.

Besi is continuously enhancing its ESG methodology and data collection so as to identify all material impacts for inclusion in the ESG report. For example, our Scope 3 CO_2 emissions from inbound freight at our Dutch plating research and development site were added in 2023. Comparable numbers for prior years were not adjusted due to a lack of available data.

External reporting frameworks

As part of our expanded reporting activities, we have analyzed appropriate external frameworks to enhance and broaden Besi's ESG strategy. We have aligned our reporting principles with them as much as possible to ensure that Besi's reporting is appropriately aligned with its business and operations.

Besi has prepared the sustainability information in this Annual Report with reference to the GRI universal standards for the 1. Foundation, 2. General disclosures and 3. Material topics including the reporting principles as included in chapter 4 of GRI 1. Foundation. We refer to Annex 2 of our 2023 ESG report for our GRI content index 2023 available at **www.besi.com**.

In addition, the Sustainability Accounting Standards Board ("SASB") published 77 industry standards to enable business to communicate material sustainability information to their investors. We believe that the semiconductor industry-specific standards and metrics provided by the SASB[1] are appropriate for a company of Besi's business and size. When material topics are not covered by SASB, we apply topic specific disclosures from the Global Reporting Initiative ("GRI") and/or our own developed criteria whenever possible. A majority of the requisite information for GRI compliance is available and presented on our website including a list of the key topics, metrics and disclosures necessary for compliance with SASB as well as a list of material topics with their respective reporting criteria (Annex 1 of our 2023 ESG Report). In addition, we intend to assess the applicability of other frameworks such as the IFRS Sustainability Disclosure Standards of the International Sustainability Standards Board ("ISSB") and the Taskforce for Nature-related Financial Disclosures ("TNFD").

[1] The SASB Standards became a resource of the IFRS Foundation as of August 1, 2022, upon consolidation of the Value Reporting Foundation (which housed the SASB Standards and the Integrated Reporting Framework) into the IFRS Foundation.

The CSRD is effective for Besi as of January 1, 2024. As such, we will be required to report in accordance with the European Sustainability Reporting Standards (ESRS) in Besi's 2024 Annual Report (published in 2025). In 2023, Besi initiated its CSRD compliance activities, implementing various actions to ensure readiness on a timely basis. For instance, we started to assess material topics by means of a 'double materiality assessment' according to ESRS requirements. During 2024, we will conduct a gap assessment against the final standards and develop an implementation roadmap to ensure compliance.

Additionally, we published both a new ESG policy and a Diversity and Inclusion policy which can be found on our website. The ESG policy aims to address the material topics involved in our business in alignment with our long-term value creation strategy for stakeholders while conducting our business in a sustainable way, respecting both the environment and society. The Diversity and Inclusion policy outlines what diversity and inclusion means to Besi, our goals and what we are doing to promote a diverse and inclusive business culture. Such policies will be updated following completion of our Double Materiality Assessment and gap analysis versus ESRS standards.

EU Taxonomy

The EU Taxonomy Regulation (EU 2020/852) ("EU Taxonomy") is a green classification system that determines which economic activities can be considered environmentally sustainable under the EU framework. It helps companies, investors, and other stakeholders identify and invest in activities that contribute to sustainable objectives.

The EU Taxonomy establishes six environmental objectives, each supported by subsequent delegated acts that define related activities and determine technical screening criteria ("TSC"):

- Climate change mitigation ("CCM").
- Climate change adaptation ("CCA").
- Sustainable use and protection of water and marine resources ("WTR").
- Transition to a circular economy ("CE").
- Pollution prevention and control ("PPC").
- Protection and restoration of biodiversity and ecosystems ("BIO").

The EU Taxonomy requires that any undertaking which is subject to Directive 2013/34/EU report on its alignment with the EU Taxonomy's objectives[2]. The relevant Key Performance Indicators ("KPIs") for eligibility and alignment are reported as the proportion of turnover, capital expenditure ("CapEx") and operating expenses ("OpEx"). In 2022, the required disclosure was limited to eligibility and alignment assessment for CCM and CCA activities. Starting in 2023, the disclosure requirement has been expanded to also include the eligibility of activities for the remaining four objectives.

[2] The EU Taxonomy Regulation (EU) 2020/852 as supplemented with Commission Delegated Regulation (EU) 2021/2139, Commission Delegated Regulation (EU) 2021/2178, Commission Delegated Regulation (EU) 2023/2485 and Commission Delegated Regulation (EU) 2023/2486.

BESI'S ESG RATING TRENDS

ESG Rating Agent	2021 Score	2022 Score	2023 Score	Current Ranking
MSCI	'BBB'	'A' ↑	'AA' ↑	Second highest possible MSCI ESG rating
SUSTAINALYTICS	17.8	15.6 ↑	14.4 ↑	12th out of 342 semiconductor related companies
ISS ESG	C-	C-	C ↑	Top 10% of industry
S&P Global	39	47 ↑	50 ↑	Above industry average (score 21)

Besi's accounting principles for determining turnover, capital expenditures and operating expenses under the EU Taxonomy are aligned with the accounting principles included in Note 2 to the Consolidated Financial Statements. Operating expenses as per the EU Taxonomy have a different definition and are included as a subset of the operating expenses reported in the Consolidated Financial Statements.

Circular economy

This year, Besi extended the scope of the EU Taxonomy assessment to the activities outlined in the Environmental Delegated Act that came into force in June 2023. Besi has identified the following revenue streams and associated economic activities under the Circular Economy objective:

- Manufacture of electrical and electronic equipment (CE 1.2), associated with Besi's core activity of manufacturing semiconductor assembly equipment.
- Repair, refurbishment, and remanufacturing (CE 5.1), associated with the extended warranty service on the machines purchased from Besi in the past.

The proportion of the EU Taxonomy eligible revenue is determined as the part of the net turnover derived from our products and services associated with CE 1.2 "Manufacture of electrical and electronic equipment" and CE 5.2 "Repair, refurbishment and remanufacturing", divided by the net turnover. In addition, Besi derives a portion of its revenue from the sale of spare parts. However, in the absence of more granular financial reporting information, Besi is unable to distinguish between spare parts and wear and tear

International Women's Day, Besi Singapore.

components (referred to as consumables), a distinction explicitly outlined in the description of economic activity "Sale of spare parts (CE 5.2)". As a result, Besi has opted for a more conservative approach by not reporting eligibility for this revenue stream. This category will be further examined in the future.

Besi concluded that a portion of the CapEx associated with manufacturing equipment is essential to its revenue-generating activities. As a result, the investments associated with Besi's R&D are classified under the activity "Manufacture of electrical and electronic equipment (CE 1.2)". The denominator for the CapEx KPI includes additions to tangible and intangible assets during the financial year.

Besi further concluded that a portion of the OpEx associated with the non-capitalized R&D costs is related with its core activity of manufacturing semiconductor assembly equipment. As a result, these OpEx are classified under the activity "Manufacture of electrical and electronic equipment (CE 1.2)". Total OpEx in the scope of the EU Taxonomy are determined based on the non-capitalized costs associated with R&D, building renovation, short-term leases, maintenance and repair activities and any other direct expenditures related to the day-to-day servicing of property, plant and equipment.

The Environmental Delegated Act only mandates the disclosure of eligible amounts under its specified objectives for 2023. Reporting on alignment is required in 2024. Besi has proactively conducted a preliminary alignment assessment of activities pursuant to the Circular Economy objective, as a substantial portion of Besi's revenue falls within the scope of these activities. However, it is unlikely that Besi will report high levels of alignment next year in the absence of EU Ecolabels for machines manufactured by Besi and the extensive substantial contribution and Do Not Significant Harm ("DNSH") criteria required for the activity pursuant to CE 1.2.

Climate change mitigation

In 2023, Besi made investments to modernize its energy generation system at its site in Austria by installing heat pumps and solar panels. As a result, Besi allocated related CapEx to the activities outlined under the category "Installation, maintenance and repair of renewable energy technologies (CCM 7.6)".

To evaluate the alignment of its investments as per CCM 7.6, Besi conducted a detailed examination of Technical Screening Criteria. Besi is taking a conservative approach with regard to reporting alignment to CCM 7.6 due to insufficient evidence pertaining to the DNSH criteria for CCA, although the investments in both heat pumps and solar panels meet the substantial contribution criteria. In particular, the DNSH requires a comprehensive physical climate risk assessment for sites hosting renewable energy installations. We believe the granularity of the climate risk assessment performed by Besi in 2022 under the Task Force on Climate-related Financial Disclosures ("TCFD") falls below the expectations set forth in the EU Taxonomy framework. As such, Besi intends to revisit the assessment in 2024 to ensure that potential future investments align with the criteria.

Key Performance Indicators

In the aggregate, 82% of Turnover was eligible under CE objectives, 66% of CapEx were eligible under CCM and CE objectives, and 51% of OpEx were eligible under CE objectives. In 2024, Besi will continue to assess revenue, capital expenditures and operating expenses for eligibility and alignment in accordance with the EU Taxonomy.

Turnover

Financial year N	2023			Substantial Contribution Criteria						DNHS criteria									
Economic Activities (1)	Code (2)	Turnover (3)	Proportion of Turnover, year N (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)	Minimum Safeguards	Proportion of Taxonomy-aligned (A.1) or eligible (A.2) Turnover, year N-1 (18)	Category enabling activity (19)	Category transitional activity (20)
		mEUR	%	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1. Environmentally sustainable activities (Taxonomy-aligned)																			
n/a																			
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1)		–	0%														0%		
of which Enabling			0%														0%	E	
of which Transitional			0%														0%		T
A.2 Taxonomy-eligible but not environmentally sustainable (not Taxonomy-aligned activities)																			
				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
Manufacturing of electric and electronical equipment	CE 1.2	472.2	82%	N/EL	N/EL	N/EL	N/EL	EL	N/EL								n/a		
Repair, refurbishment, and remanufacturing	CE 5.1	2.5	0%	N/EL	N/EL	N/EL	N/EL	EL	N/EL								n/a		
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		474.7	82%														0%		
A. Turnover of Taxonomy-eligible activities (A.1+A.2)		474.7	82%														0%		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
Turnover of Taxonomy-non-eligible activities		104.2	18%																
Total		578.9	100%																

CapEx

Financial year N	**2023**			**Substantial Contribution Criteria**						**DNHS criteria**									
Economic Activities (1)	Code (2)	CapEx (3)	Proportion of CapEx, year N (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)	Minimum Safeguards	Proportion of Taxonomy-aligned (A.1) or eligible (A.2) CapEx, year N-1 (18)	Category enabling activity (19)	Category transitional activity (20)
		mEUR	%	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1. Environmentally sustainable activities (Taxonomy-aligned)																			
n/a																			
CapEx of environmentally sustainable activities (Taxonomy-aligned)		–	0%														0%		
of which Enabling			0%														0%	E	
of which Transitional			0%														0%		T
A.2 Taxonomy-eligible but not environmentally sustainable (not Taxonomy-aligned activities)																			
				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
Installation, maintenance and repairs or renewable energy technology	CCM 7.6	0.4	1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								n/a		
Manufacturing of electric and electronical equipment	CE 1.2	21.1	65%	N/EL	N/EL	N/EL	N/EL	EL	N/EL								n/a		
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		21.5	66%														0%		
A. CapEx of Taxonomy-eligible activities (A.1+A.2)		21.5	66%														0%		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
CapEx of Taxonomy-non-eligible activities		10.9	34%																
Total		32.4	100%																

OpEx

Financial year N	**2023**			**Substantial Contribution Criteria**						**DNHS criteria**									
Economic Activities (1)	Code (2)	OpEx (3)	Proportion of OpEx, year N (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)	Minimum Safeguards	Proportion of Taxonomy-aligned (A.1) or eligible (A.2) OpEx, year N-1 (18)	Category enabling activity (19)	Category transitional activity (20)
		mEUR	%	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1. Environmentally sustainable activities (Taxonomy-aligned)																			
n/a																			
OpEx of environmentally sustainable activities (Taxonomy-aligned)		–	0%														0%		
of which Enabling			0%														0%	E	
of which Transitional			0%														0%		T
A.2 Taxonomy-eligible but not environmentally sustainable (not Taxonomy-aligned activities)																			
				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
Manufacturing of electric and electronical equipment	CE 1.2	19.2	51%	N/EL	N/EL	N/EL	N/EL	EL	N/EL								n/a		
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		19.2	51%														0%		
A. OpEx of Taxonomy-eligible activities (A.1+A.2)		19.2	51%														0%		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
OpEx of Taxonomy-non-eligible activities		18.5	49%																
Total		37.7	100%																

Green activity by our customers

We deliver systems which can potentially be used by our customers for a variety of environmentally friendly applications as set forth in the following table:

Potential green activity by our customers	Application	Contribution by Besi
Power transmission	Electrical vehicles	• Our new equipment generations are used in the fabrication of advanced power packages for automotive and industrial applications enabling more efficient power conversion and reduced power dissipation.
Communication	5G cellular networks	• Our advanced SiP technologies allow for faster, more secure, more efficient and higher bandwidth transmission and reception in 5G advanced cellular networks.
More efficient high-end computing	Data centers Mobile Phones Edge/AI Phones Gaming Autonomous driving	• Our next generation die bonding systems allow for ever greater contact density per chip or SiP. As such, they require less power usage and heat dissipation for data transfer and provide a reduction of overall power usage per bit for both data center and autonomous driving applications. • The progress achieved by our hybrid bonding development has also led to significant improvements relative to the energy efficiency, material consumption and reduced heat dissipation realized by our end-customers versus substrate and leadframe assembly. • Our system development for the assembly of integrated photonics and co-packaged optics can reduce power consumption in data centers.
Less waste	General	• We continuously optimize our systems for reduced material consumption during customer operation in the areas of epoxy and molding compounds as well as the conversion to water-based chemicals in our plating process technologies as a means of reducing waste. • Our wafer level systems also facilitate the usage of chiplets in device architectures which also can significantly reduce material consumption. • We increase the throughput and yield and reduce the waste generation of our systems during customer operation by shortening learning curves and reducing operator interaction.
Circular economy	General	• We offer upgrades, retrofits and conversion kits to customers to extend the useful lives of our systems. • Some of our equipment has been running at customer sites for more than ten years. • Some customers sell our equipment to third parties in the secondary market further extending the useful lives of our systems. • We reduce the energy consumption of our systems with comparable output by optimizing process cycles and component selection. • We work with scientific institutes to further optimize our systems' material and energy usage and increase their recycling potential. • We reduce transport-based emissions via local manufacturing and the usage of alternative freight methods. • We re-use packaging in our operations to reduce waste and enhance sustainability.

TCFD

Besi recognizes the adverse effects caused by the emerging climate change crisis and carefully monitors the impact of climate change on our operations. In addition, we recognize increasing interest from customers and investors on climate topics and support the activities of the Taskforce on Climate-Related Financial Disclosures ("TCFD"). Our objective is to comply with its recommendations to provide greater transparency in the reporting of climate-related risks and opportunities. Additionally, we have used TCFD's guidance and conducted a climate change risk assessment using various scenarios to inform the development of Besi's climate strategy.

Besi has made certain climate-related disclosures versus TCFD recommendations as part of this Annual Report. An overview of all TCFD topics and relevant disclosures including the climate-related scenario analysis used for compliance with TCFD, are available in Besi's ESG Report that can be found at **www.besi.com**.

Our key stakeholders

Besi regularly engages with stakeholders to identify business and performance opportunities, issues and risks in order to better assess its long-term sustainable value creation model. Insights are gathered through a variety of channels including dialogue with investors and customers, management reviews, employee surveys and internal and external audits. We listen to our stakeholders, strive to be as responsive as possible and to exceed their expectations.

We identify key stakeholders according to Besi's impact on their interests as well as their ability to influence our strategy and objectives. Our key stakeholders include shareholders, suppliers, customers, employees, local communities, society and local governments.

Stakeholder group	Why we engage	How we engage
Shareholders	• Shareholders expect Besi to protect their investment and provide a competitive return on capital while operating responsibly as a corporate citizen. • Both existing and new investors have shown increased interest in ESG and have specific ESG criteria with which to evaluate Besi's performance.	• Shareholders are engaged through an active investor relations program including quarterly and annual conference calls, roadshows, conferences, analyst presentations and Besi's Annual General Meeting ("AGM"). • We maintain close contact with investors in Europe, North America and Asia. • We conduct regular meetings with investment professionals and encourage them to ask questions during our earnings calls, meetings, conferences and at our AGM. • We engage in important face-to-face dialogue and receive valuable feedback about our business and ESG topics. • We posted a formal ESG policy on our website to better inform shareholders and analysts as to Besi's material topics and activities.
Suppliers	• Maintaining a responsible supply chain is an important part of our Responsible Business pillar. • A high quality, flexible and scalable supply chain is critical to satisfying customer needs in a cyclical business and to the long-term success of our business. • We seek to build long-term, mutually beneficial relationships with our suppliers. • We are expanding our efforts to ensure that all suppliers can match Besi's own environmental and ethical standards.	• We engage with suppliers through direct dialogue, site visits and audits. • We perform annual third-party external audits for all significant production and development facilities with respect to supplier ISO 9001, ISO 14001, ISO 45001, and RBA capabilities. • We work together with suppliers to lower our joint environmental footprint, create sustainable products and supply chains and assess and mitigate social, health, safety and ethical risks. • In 2023, we conducted an ESG roadshow and provided training sessions for key suppliers to increase their ESG-related knowledge. We also asked 55 material suppliers to respond to an ESG assessment survey to which 84% responded. • We have begun engagement with suppliers as to the origin of their imported steel and iron supplies due to new EU restrictions.

Stakeholder group	Why we engage	How we engage
Customers	• Building strong relationships is important to attract customers and to our revenue growth. • Providing superior customer support is critical to maintaining strong relationships. • Besi's customers increasingly seek products that are sustainable, environmentally friendly and ethically produced. • Our ESG strategy is formulated with sustainable design as a key component.	• Customer satisfaction is an important measure to gauge customer fulfilment. • We have a very experienced team of 268 sales and service people globally which maintain customer relationships and engage key customers on topics such as device roadmaps, assembly equipment requirements and future market trends. • We conduct annual customer satisfaction surveys to assess existing relationships and identify areas for improvement. • Customer satisfaction scores have increased over the past five years. In 2023, customers were particularly satisfied with the reliability, durability and performance of Besi's systems. • We engage with customers to ensure that our products meet their environmental and social standards. • We conduct sustainable design training on a regular basis in both Austria and Switzerland to help engineers promote sustainable design in next generation product development.
Employees	• Besi considers satisfied and engaged employees as a key ingredient for its successful growth. • Employees expect Besi to have high social and ethical standards in the conduct of its business. • Employees also expect us to provide them with equal treatment and opportunities, safe working conditions and career development potential. • Our ESG performance and engagement will become increasingly important in attracting and retaining talent.	• We promote an atmosphere of open dialogue between managers and employees. During performance appraisals, both employees and managers are encouraged to voice their concerns in a collegial exchange. • Employee interests are also communicated in a more institutional way via local European Works Council representations. • We conduct Town Hall meetings for all employees on a quarterly basis to inform them as to current business and financial developments. • We have launched ESG resource pages in certain locations to educate and engage our employees about Besi's ESG strategy and progress. • We conduct bi-annual employee engagement surveys. Our most recent 2023 survey reported a high level of participation (94%) and engagement (89%).
Local communities, governments and society	• Besi relies on the health, wellbeing and stability of local communities in the regions where we operate. • We aim to have a positive impact on communities through good corporate and employee conduct. • Society expects Besi to respect national and international laws and regulations, positively impact local communities and provide transparency on economic, environmental and social topics.	• Besi invests in many community projects, particularly in Asia. • Senior managers review any concerns raised by local communities. They try to communicate any issues which may arise to all stakeholders as well as best practices for successful resolution. • We abide by appropriate social, ethical and environmental standards in our operations. • We meet or exceed minimum legal and regulatory compliance levels. • We engage in responsible tax practices. • We pay our fair share of taxation in all jurisdictions in which we have operations. • Local governments expect compliance with local laws, regulations and care for the health, safety and security of their communities. • Many countries pay close attention to ESG topics in light of increased concern over serious environmental issues. • We use international social and ethical standards wherever possible in all our operations. • We participate in dialogue with local chambers of commerce as appropriate. • We do not participate in lobbying activities or make political contributions.

ENVIRONMENTAL IMPACT

Besi is committed to reducing its environmental impact, resource consumption and the carbon footprint of its operations which includes increasing the sustainability of the components, modules and systems we produce and purchase from third parties. Material topics of this pillar include a reduction of carbon emissions and overall usage of energy, waste, water and hazardous materials. It also focuses on integrating sustainable design processes into Besi's development activities and increasing the utilization of renewable energy sources. We updated our targets for 2024 and 2030 in 2022 and updated the base year for target setting from 2019 to 2021, as a result of Besi's successful performance versus prior targets. In 2023, the Supervisory Board approved a company-wide ESG policy for publication on our corporate website outlining Besi's commitment to climate change mitigation, energy efficiency, renewable energy deployment, waste reduction, re-use and recycling. In addition, we set an objective of reaching net zero greenhouse gas emissions in our operations by 2030, incorporating all Scope 1 & 2 emissions.

Set forth below are Besi's material topics related to its Environmental Impact process pillar, progress in 2023, progress against Besi's targets relative to the 2021 baseline and its targets for 2024:

Suppliers Day at Besi APac, Malaysia.

Material topic	2023 progress update versus 2022	2023 progress update versus 2021 base year	2024 target versus 2021 base year
Energy use and renewable energy	• Fuel consumption intensity increased by 10% but declined on an absolute basis (14%). • Electricity consumption intensity increased by 48% and an increase of 21% on an absolute basis. • 100% renewable energy achieved at European operations which was comparable to 2022. • Renewable energy utilized globally declined from 76% to 71%. • Reporting against TCFD framework continued with relevant disclosures wherever possible. Projects realized: • Purchase of renewable electricity at new Glenmarie, Malaysia site. • Expansion of existing solar PV system and installation of groundwater heat pump to replace gas usage at Besi Austria. • Increased lighting energy efficiency at Besi Netherlands. • Expansion of LED lighting system at Besi Switzerland. • Installation of smart meters at Meco facility in the Netherlands.	• Fuel consumption: Fuel intensity of 3.2 Kwh/€million revenue was roughly equal to 2021. • Electricity consumption: Electricity intensity increased to 34 Kwh/€million revenue versus 21 Kwh/€million revenue in 2021 (+62%). • Renewable energy in Europe increased to 100% versus 92% in 2021. • Renewable energy utilized globally increased to 71% in 2023 versus 20% in 2021.	• 15% reduction in fuel consumption intensity. • 11% increase in energy consumption intensity due to increased cleanroom requirements. • 75% renewable energy utilized globally.

Material topic	2023 progress update versus 2022	2023 progress update versus 2021 base year	2024 target versus 2021 base year
Carbon emissions	• Scope 1 & 2 emissions intensity increased from 5.2 to 8.9 tCO_2/€million revenue (+71%). • Absolute Scope 1 & 2 emissions increased from 3,755 to 5,124 tCO_2 (+36%). • Scope 3 emissions intensity increased from 13.6 to 17.0 tCO_2e/€million revenue (+25%). • Absolute Scope 3 emissions roughly equal: from 9,817 tCO_2e to 9,843 tCO_2e. Projects realized: • Increased utilization of renewable energy in our Malaysian facilities. • EV vehicles purchased in China to replace petrol-based ICE vehicles. • Reduced shipments from Besi Netherlands to Besi APac to once a week versus twice per week.	• Scope 1 & 2 emissions intensity of 8.9 tCO_2/€million revenue decreased versus 14.4 tCO_2/€million revenue in 2021 (-38%) mainly as a result of the accelerated implementation of renewable energy usage in Asia. • Absolute Scope 1 & 2 emissions reduced from 10,812 tCO_2 in 2021 to 5,124 tCO_2 (-53%). • Scope 3 emissions intensity rose from 15.9 tCO_2e/€million revenue in 2021 to 17.0 tCO_2e/€million revenue (+7%). • Absolute Scope 3 emissions declined reduced from 11,942 tCO_2e in 2021 to 9,843 tCO_2e (18% reduction).	• 62% reduction in Scope 1 & 2 carbon emissions intensity. • 12% reduction in Scope 3 carbon emissions intensity.
Waste and hazardous waste disposal	• Total waste intensity increased from 319 to 430 kg/€million revenue (+35%) due to completion of cleanroom facilities in Singapore and Malaysia. • Absolute total waste disposal increased by 8% mainly due to scrapping activities in Besi APac and Besi Austria. • Hazardous waste decreased by 8% in absolute terms. • Reduced paper waste at Besi Netherlands through sustainable procurement initiative with 70% of total waste now recycled at this site.	• Total waste intensity of 430 kg/€million revenue increased versus 316 kg/€million revenue (+36%). • Absolute total waste increased by 5%. • Absolute hazardous waste decreased by 33%.	• 15% reduction in total waste intensity. • 20% reduction in hazardous waste.
Water withdrawal	• Water withdrawal intensity increased from 46 to 51 m^3/€million revenue (+11%). • Absolute water withdrawal decreased by 9%. • Use of centrifuge at China facility to increase water recycling.	• Water intensity of 51 m^3/€million revenue increased by 24% versus 41 m^3/€million revenue in 2021. • Absolute water withdrawal decreased by 3%.	• 2% reduction in water withdrawal intensity.
Sustainable design	• Projects underway to analyze product lifecycles in multiple product groups. • Finished wastewater treatment project in collaboration with Copernicus Institute of Sustainable Development at Utrecht University, the Netherlands, to measure ecological footprint of Besi's plating systems. • Launch of Design-to-X initiative to incorporate a Design-to-Cost and Design-to-Sustainability philosophy in product design.	• Roadmaps, priorities and initiatives developed for sustainable system design in accordance with targets.	• Develop additional targets for sustainable system design.

SDG alignment

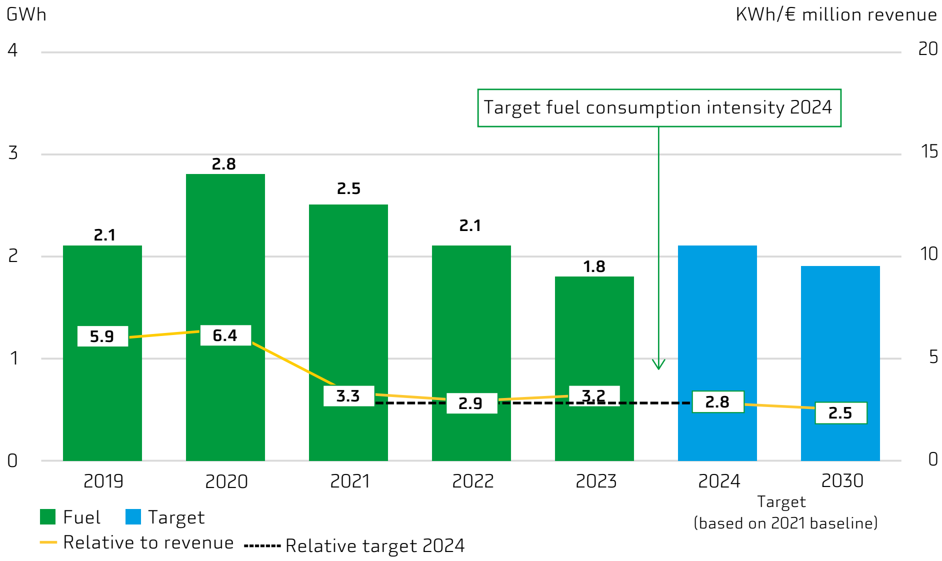
The following SDGs align with the Environmental Impact pillar of Besi's ESG strategy:

Goal/description	How we contribute
7 AFFORDABLE AND CLEAN ENERGY – Ensure access to affordable, reliable, sustainable and modern energy for all.	We increased the percentage of renewable energy used across our operations to 71% in 2023 which was significantly above the 25% renewable energy target for 2022. On track to meet the revised 2024 target of 75%.
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE – Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.	We conduct life cycle assessments as a means of reducing our products' environmental footprint while increasing their efficiency and recyclable content. Toward this end, we have collaborative projects underway with several European universities and launched an initiative called Design-to-X to increase Besi's sustainable system design for each successive product generation.
12 RESPONSIBLE CONSUMPTION AND PRODUCTION – Ensure sustainable consumption and production patterns.	The availability and conservation of natural resources is one of today's largest global challenges. We accept our responsibility by concentrating on the procurement of environmentally friendly materials, reducing waste and packaging in our supply chain for product manufacturing and increasing our participation in the circular economy.
13 CLIMATE ACTION – Take urgent action to combat climate change and its impacts.	We recognize the urgent global challenge of reducing greenhouse gas emissions. We contribute to this effort by investigating innovative systems and solutions to help reduce emissions during their entire use phase and by providing a transparent overview of greenhouse gas emissions as part of our Annual Report. In this regard, we significantly outperformed the 2022 targets for Scope 1, 2 and 3 emissions and fuel and electricity intensity against a 2019 baseline. In 2022, we set new challenging targets for achievement by 2024 and 2030 against a 2021 baseline. We aim to reach net zero greenhouse gas emissions in our operations by 2030, incorporating all Scope 1 & 2 emissions. Our long-term objective is to reach net zero carbon emissions by 2050 in recognition of the global ecological and societal imperatives caused by climate change.

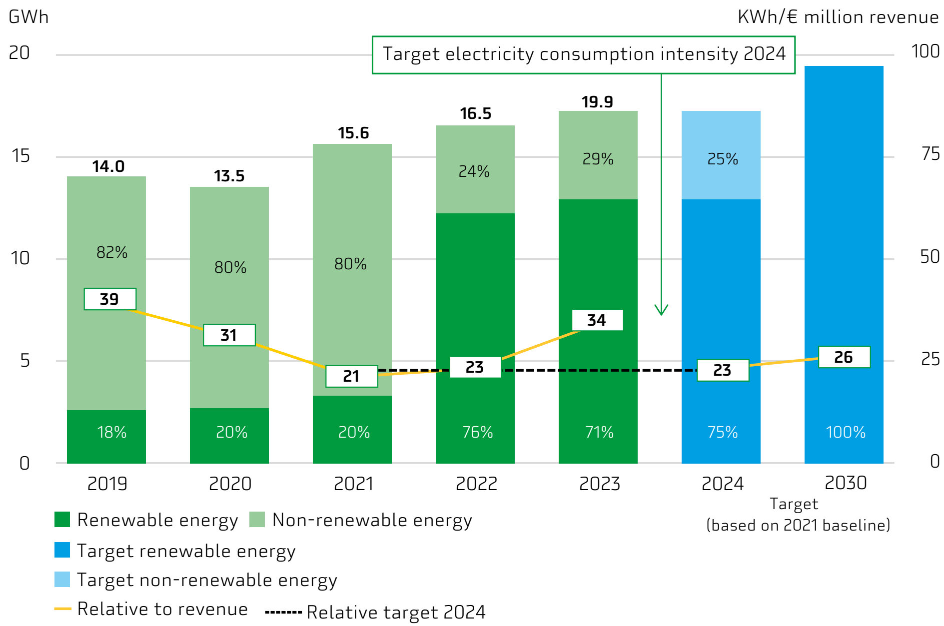
Energy use and renewable energy

We seek to decrease our energy usage via a reduction of fuel and electricity consumption and increased utilization of renewable energy sources.

FUEL CONSUMPTION



ELECTRICITY CONSUMPTION



In 2023, Besi's absolute fuel consumption declined by 14% versus 2022. However, Besi's electricity consumption increased on both an absolute and relative intensity basis compared to 2022 due to the expansion of a new production site in Glenmarie, Malaysia, the completion of cleanrooms at our Singapore and Malaysia facilities. In addition, Besi's percentage of renewable energy utilized in 2023 decreased versus 2022 due primarily to the limited availability of renewable energy at the Glenmarie site in the first half of 2023. However, we were able to purchase renewable electricity for this site in the second half of 2023 and will continue to do so in 2024. As a result, we expect to meet the 2024 target for this KPI. At present we purchase 100% of our electricity needs from renewable source at all our European operations.

Groundwater heat pump project at Besi Austria

During 2023, we invested in a groundwater heat pump at Besi's Radfeld, Austria facility to replace natural gas usage for its central heating system. The project's aim, in the best-case scenario, is to fully substitute gas usage with renewable heat generation and to reduce gas usage on an annual basis by approximately 50,000m³, or approximately 100 tCO_2 emissions. The project is expected to be operational in the first quarter of 2024.

Carbon emissions

Reducing Besi's carbon footprint is a key focus of our ESG strategy. In reporting carbon emission levels, we have adopted the standards and methodology put forth by the Greenhouse Gas Protocol, an independent standard which divides emissions into three scopes:

- *Scope 1 emissions:* cover direct greenhouse gas ("GHG") emissions resulting from day-to-day business activities. This category includes on-site fuel combustion such as gas boilers as well as manufacturing, transport and fugitive emissions.
- *Scope 2 emissions:* cover indirect GHG emissions which result from the electricity, heat and steam we purchase from external sources.
- *Scope 3 emissions:* include our emissions resulting from upstream and downstream transportation, business flights and non-renewable electricity consumption, transmission and distribution losses and well-to-tank, except for the exclusions as mentioned in the Reporting Scope section.

Our ambition is to reduce carbon emissions intensity (carbon emissions/revenue) across all three reporting scopes. We exceeded targets in 2022 set in 2019 and intend to meet or exceed more challenging targets set for 2024. Toward this end, we aim to reach net zero operational greenhouse gas emissions in our operations by 2030, including all Scope 1 & 2 emissions.

River cleaning by Besi Singapore employees.

Our absolute Scope 1 emissions decreased by 38% in 2023 relative to 2022 due to improved energy efficiency. Our absolute Scope 2 emissions increased in 2023 relative to 2022 due to a variety of construction projects associated with the expansion of our technology and production capabilities, including the temporary absence of renewable energy available at the Glenmarie, Malaysia site.

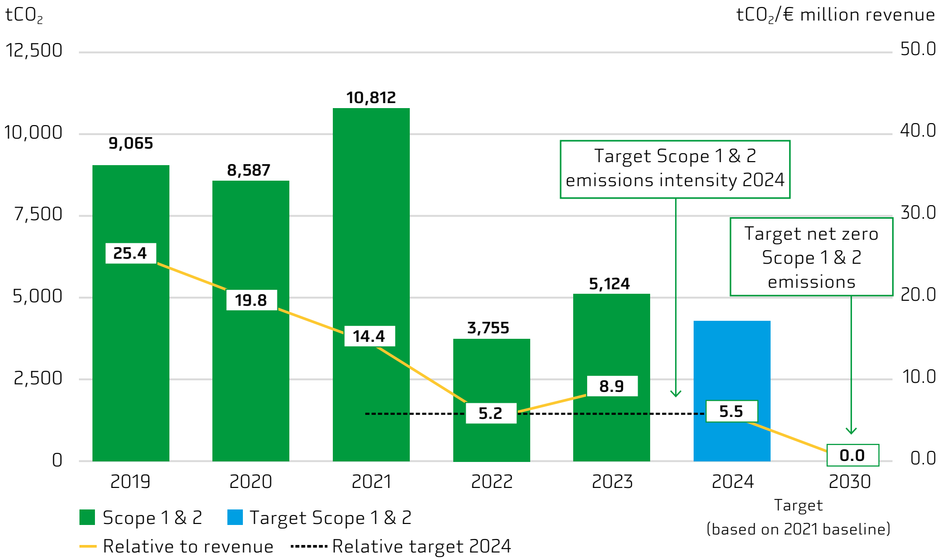
In addition, both Besi's Scope 1 & 2 and Scope 3 emissions intensity increased in 2023 relative to 2022 due primarily to the significant downturn experienced in the semiconductor assembly equipment industry which caused our revenue to decline by 20% year over year. However, Besi has reduced its Scope 1 & 2 emissions intensity versus the 2021 baseline by 5.5 tCO_2 emissions/€million revenue, or 38%, as a result of the accelerated implementation of renewable energy across our Asian and European facilities.

Furthermore, Besi has reduced its absolute Scope 3 emissions versus our 2021 baseline by 2,099 tCO_2e, or 18%, reflecting progress in the areas of transportation, freight and travel as well as the beneficial impact of a higher proportion of leading edge assembly systems in our product mix. In 2023, Besi's Scope 3 emissions intensity increased to 17.0 tCO_2e emissions/€million revenue, a 7% increase versus the 2021 baseline.

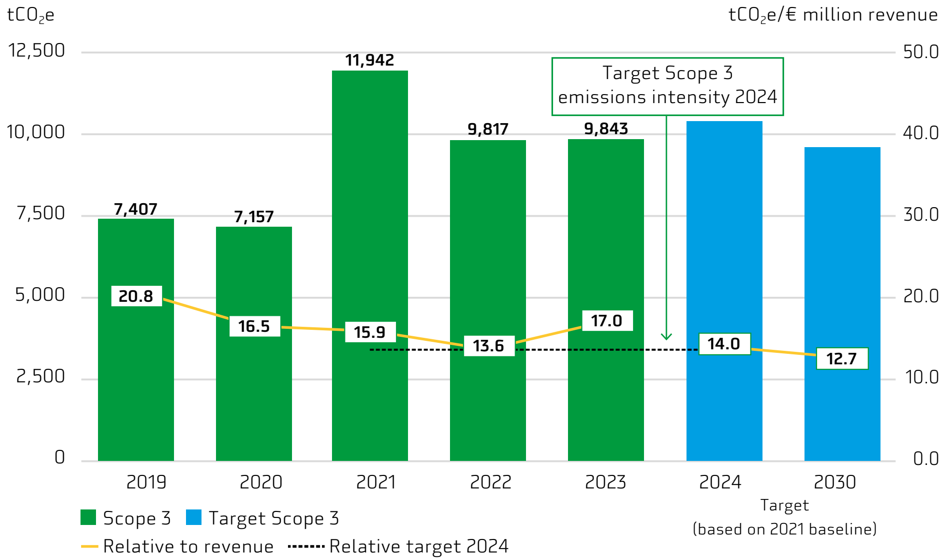
Installation of solar power reduced energy usage at Besi Austria

We expanded a solar roof and increased the usage of photovoltaics systems in 2023 at Besi's Radfeld, Austria facility to help reduce aggregate energy consumption and Scope 2 emissions. The solar cells utilized were assembled using Besi's own equipment.

SCOPE 1 & 2 EMISSIONS



SCOPE 3 EMISSIONS*

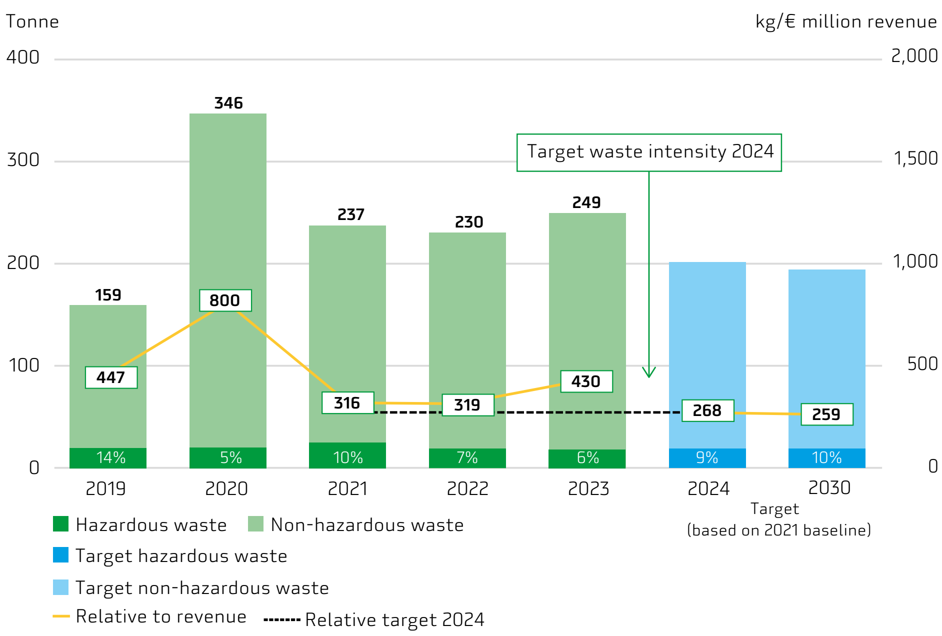


* Besi expanded the categories included in its Scope 3 emissions measurement for 2022. Therefore, Scope 3 emissions data for the years 2019 – 2021 are not fully comparable.

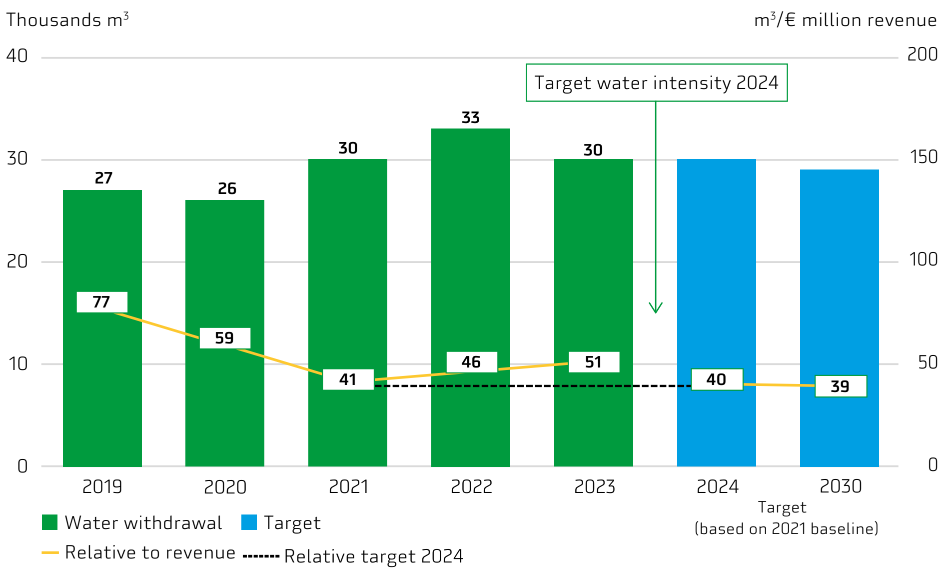
Waste and hazardous waste disposal

We seek to reduce the waste and hazardous waste produced by our operations wherever possible. In all facilities, waste separation systems are in place and the re-use, reduce, recycle concept is well established. The principal focus of our efforts is the reduction of waste used in the packaging process wherein we use materials such as plastic, wood and cardboard to ensure proper protection. There was an increase in Besi's absolute waste produced and waste intensity in 2023 relative to 2022. The launch of the new Glenmarie, Malaysia site, the scrapping of obsolete materials at Besi Austria in the first half of 2023 and refurbishments to the assembly space at Besi Netherlands all contributed to the increase in absolute waste. The increase in absolute waste combined with the significant revenue decline experienced by Besi in 2023 led to a significant increase in our waste intensity this year. Given that these construction activities were completed in 2023, we anticipate reducing waste intensity materially in 2024 and intend to meet or exceed our 2024 intensity target in this area.

WASTE



WATER WITHDRAWAL



Water withdrawal

Water conservation is another priority. Virtually all water used in our operations is discharged back into local water systems. As a result, our net water usage is limited. In addition, Besi does not operate in any regions with a high or very high-water risk as defined by the World Resources Institute. Besi utilized approximately 30 million liters of fresh water in its operations in 2023 of which approximately 90% was utilized in our Asian production operations. Water withdrawal intensity increased this year due to the significant revenue decrease experienced.

Sustainable design

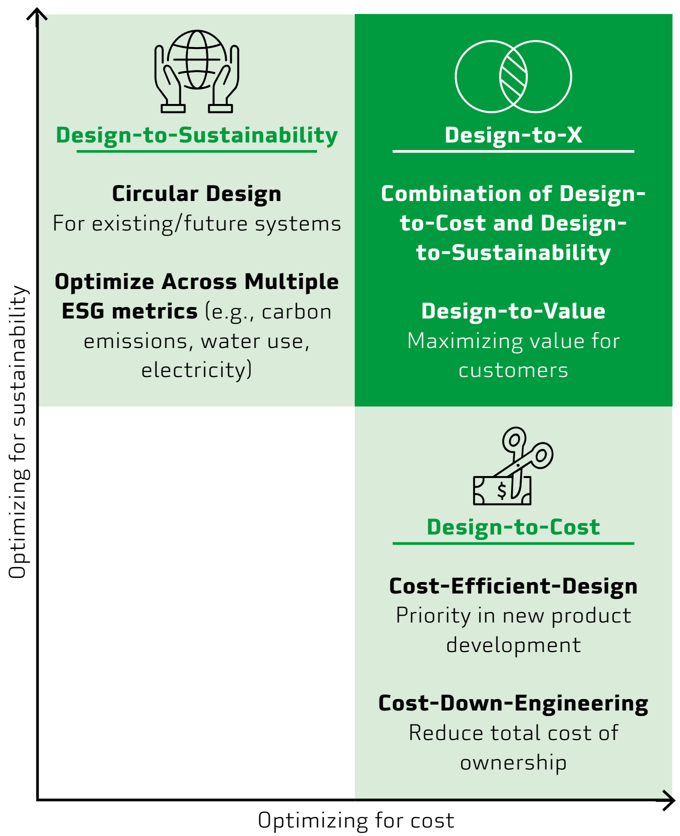
Besi develops high quality, premium priced system solutions for customers offering leading edge reliability, accuracy, throughput, system uptime, yield of defect free devices, longevity and low environmental impact. We have implemented externally certified ISO 9001 and ISO 14001 management systems to manage quality and environmental issues in our production operations. In addition, six of seven Besi operations have received ISO 45001 certificates of approval for their occupational health and safety management system. Our development efforts focus on system efficiency both in terms of environmental impact and productivity/cost savings with a particular emphasis on:

- Leading edge product innovation.
- Energy efficiency.
- Recycling potential of applied production materials.
- Recycled content used in our products.
- Exclusion of hazardous components in our systems.
- Exclusion of conflict materials from our design process.

We prioritize sustainable design in our system development efforts and conduct life cycle assessments as a means of reducing their environmental footprint while increasing their efficiency and recyclable content. As a result, we can provide customers a low total cost of ownership and an attractive return on initial investment while promoting sustainability themes.

In 2021, we launched several sustainable design initiatives focused on design-to-cost, quality and sustainability. Such initiatives were focused on upgraded versions of our mainstream die bonding product lines as well as for new wafer level assembly platforms such as hybrid bonding and next generation TCB chip to wafer systems. We also participated in a project with the University of Applied Sciences and Arts (Lucerne, Switzerland) to identify potential areas of cooperation with respect to environmentally friendly product design. Internal projects were also commenced to analyze product lifecycles in multiple product groups to further extend their useful lives.

In 2023, Besi increased its focus on sustainable design initiatives related to energy consumption and greenhouse gas emissions. Toward this end, we developed an initiative named "Design-to-X" as part of our strategic plan review. This initiative combines Design-to-Cost and Design-to-Sustainability concepts to identify ESG improvement opportunities in all product groups while reducing the cost of many mature die attach and packaging platforms. More specifically, the review analyzed the ways Besi could reduce its greenhouse gas emissions and energy use and minimize the carbon footprint for its end-users while increasing product performance and efficiencies in design, procurement and operations. We have developed certain key deliverables utilizing Besi's existing sustainable engineering efforts and plan to engage with customers who derive the greatest value from decarbonization efforts.



- Introduce Design-to-Sustainability (focusing on ESG metrics)
- Embed Design-to-X in development process
- Set up requisite engineering capabilities and resource allocation
- Continue reducing total cost of ownership for die bonding and packaging systems

In addition to such initiatives, we completed a wastewater treatment project this year in collaboration with the Copernicus Institute of Sustainable Development at Utrecht University, the Netherlands, to measure the ecological footprint of Besi's plating systems. The project highlighted reduced electricity consumption as a priority in our sustainable design efforts for this platform.

Besi's systems can also be customized, reconfigured and redeployed over their product lifespan thus extending their useful life as well as reducing their environmental impact and raw material consumption. Customer utilization of our extensive global network of field service and spare parts also helps customers extend the useful life of our systems.

Future sustainable design priorities

- Realization of benefits from Design-to-X initiative.
- Optimization of material selection and consumption.
- Optimization of transport packaging.
- Sourcing from more sustainable suppliers.
- Implementation of performance and design initiatives at the component level.
- Logistics optimization.
- Enhance energy efficiency and usage of renewable energy at our Asian facilities.
- Reduction of discretionary travel.

Besi Switzerland collaborating on environmentally friendly product design

In 2021, we commenced participation in a project with the Lucerne University of Applied Sciences and Arts (Switzerland) to identify potential fields of interest for more environmentally friendly product design. Different scenarios involving customers, production locations and processes were examined and highlighted a range of environmental influences. As a result of our collaborative efforts, we set a target to reduce energy consumption of our die attach platforms by 10% by 2027. We are developing a ten-year roadmap to create additional energy savings programs.

PEOPLE WELLBEING

Material issue	2023 progress update versus 2022	2023 progress update versus 2021 base year	2024 target versus 2021 base year
Diversity and inclusion	• Female employees as % of total employees was equal to 2022 (17%). • Female managers as % of total managers decreased from 20% in 2022 to 17% in 2023. • Local managers as % of total managers was equal to 2022 (88%). • Implemented Diversity and Inclusion policy.	• 17% female employees as % of total employees, equal to 2021. • Female managers as % of total managers decreased from 18% in 2021 to 17% in 2023. • Local managers as % of total managers increased from 87% in 2021 to 88% in 2023.	• Increase % of female employees as % of total employees to >19%. • Increase % of female employees in management to >21%. • Maintain % of local nationals in management >86%.
Health and safety	• Reported incidents declined to three versus six in 2022. • Of the three incidents reported, one was a minor absence (less than four days) and two were first aid cases in which the employee could resume work immediately after treatment. No fatalities were reported. • Six out of seven Besi facilities (Austria, China, Malaysia, Singapore, Switzerland and our Meco facility in the Netherlands) are now ISO 45001 compliant.	• Incidents reported decreased to three versus five in 2021.	• Achieve safety incident record of zero.
Employee engagement and career development	• 31 average training hours per employee, equal to 2022. • Bi-annual employee engagement survey conducted by Willis Towers Watson. • Survey results indicated that employees feel safe in their current physical working environment and that there is effective collaboration between departments to meet customer needs. • Employees also had a strong understanding and motivation to contribute to Besi's business and ESG objectives and felt that there is a strong feeling of trust between team members. • Survey results will be used to improve areas of under-performance both company-wide and at facility-levels. • Sustainable design training conducted in Austria and Switzerland to help engineers promote sustainable design in next generation product development. • Quarterly Town Hall meetings for all employees conducted to share business progress. • Employee turnover reduced from 11% in 2022 to 7% in 2023.	• 2023 employee engagement survey indicated high level of participation (94%) and engagement (89%). • Besi scored above the high-tech norm in six of seven categories in the 2023 survey. • Average training hours per employee increased to 31 hours, up 19% versus 2021.	• Maintain employee engagement >85%. • Remain above high-tech benchmark. • Maintain investment in employee training >21 working hours per employee per year.

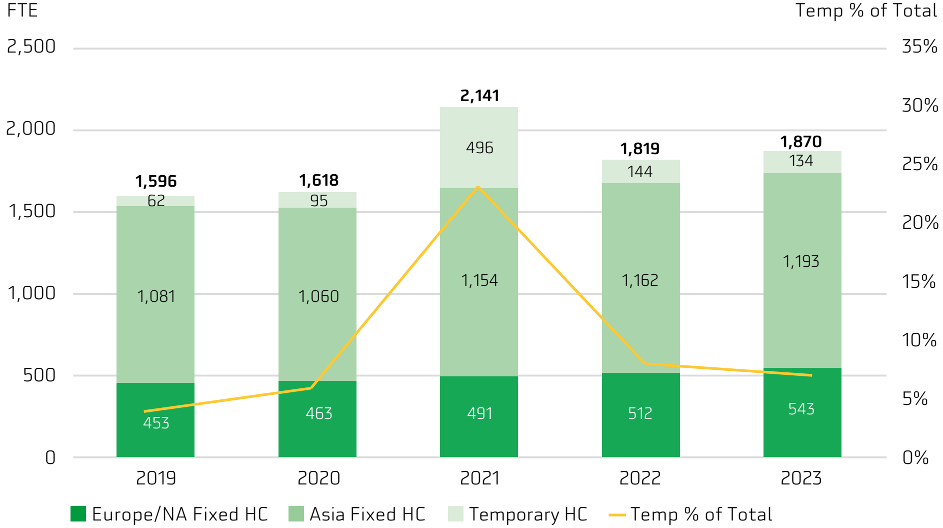
SDG alignment

The following SDGs align with the People Wellbeing pillar of Besi's ESG strategy:

Goal/description	How we contribute
3 GOOD HEALTH AND WELL-BEING — Ensure healthy lives and promote well-being for all at all ages.	Employee health, safety and wellbeing are material topics. Besi's production sites have EHS officers and committees and a health and safety management system and procedures. EHS committees are responsible for the inspection, enforcement and promotion of health and safety matters in the workplace. Employees also regularly receive EHS training.
5 GENDER EQUALITY — Achieve gender equality and empower all women and girls.	We are committed to improving gender diversity across all operations and providing equal opportunities for all employees. We increased the percentage of women in management from 14% in 2019 to 17% in 2023. We are committed to further increasing the percentage of women in management and women in the workforce but recognize the difficulties achieving such goals per region due to the limited number of qualified personnel available.
8 DECENT WORK AND ECONOMIC GROWTH — Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.	We are committed to providing a safe and secure working environment for all employees. All employees are made aware of their rights including the right to freedom of association and collective bargaining.

Besi is committed to being a good employer and promoting a workplace culture supporting the achievement of its business and ESG objectives. We comply with all applicable employment laws and regulations in the countries in which we operate. All employees are made aware of their rights including the right to freedom of association and collective bargaining. We seek to be a preferred employer by emphasizing the diversity, health, safety and wellbeing of our employees, flexible working arrangements and career growth and development. In 2023, the Supervisory Board approved a companywide ESG policy that has been published on our corporate website. This policy outlines Besi's commitment to employee engagement and career development, diversity and inclusion, equal opportunity, elimination of discrimination and health and safety.

HEADCOUNT TRENDS



Topic	2019	2020	2021	2022	2023
Employee turnover	16%	7%	10%	11%	7%
New hires	6%	8%	19%	11%	10%

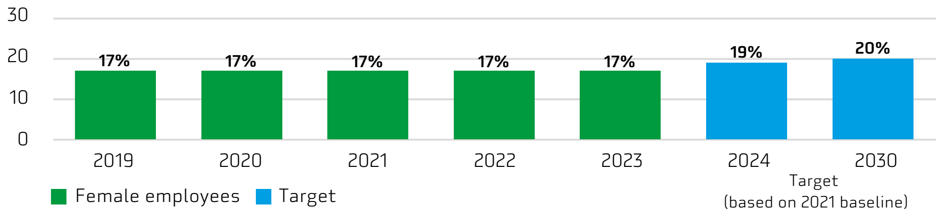
As indicated in the tables above, our fixed and temporary headcount levels vary significantly from year to year depending on conditions in our cyclical semiconductor assembly equipment market. In market upturns, headcount typically increases. Conversely, in downturns, headcount is reduced in alignment with decreased demand, particularly as it relates to temporary production personnel. Similarly, new hiring also follows market movements with higher percentages experienced in industry upturns and lower ratios realized in industry downturns. Employee turnover typically, but not always, follows such cyclical market influences. Turnover is typically lower in downturns where employees are less likely to seek employment elsewhere and higher in industry upturns where there is more demand for personnel industry wide.

Diversity and inclusion

Besi values and encourages cultural, age and gender diversity in its workforce. Management believes that diversity and inclusion help broaden our perspective and contribute to growth. Diversity and inclusion are priority topics in Besi's ESG strategy with improved gender diversity across all operations the most immediate focus. We recognize that women continue to be underrepresented in science, technology, engineering and mathematics fields and is thus a priority in recruiting efforts. Many of our product groups and manufacturing sites engage with local universities to drive growth in diversity representation. Our newly published ESG policy and Code of Conduct also emphasize equal opportunity for all employees and applicants. Specifically, the Diversity and Inclusion policy outlines what diversity and inclusion means to Besi, our goals and what Besi is doing to promote a diverse and inclusive business culture.

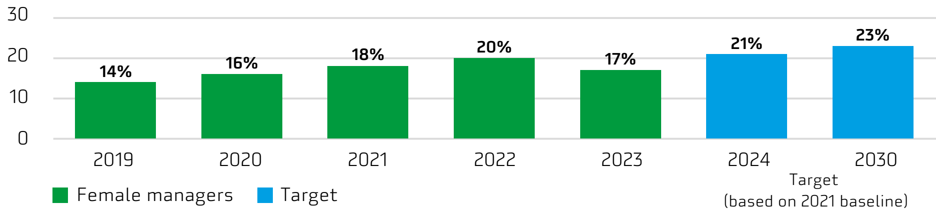
FEMALE EMPLOYEES

% of headcount



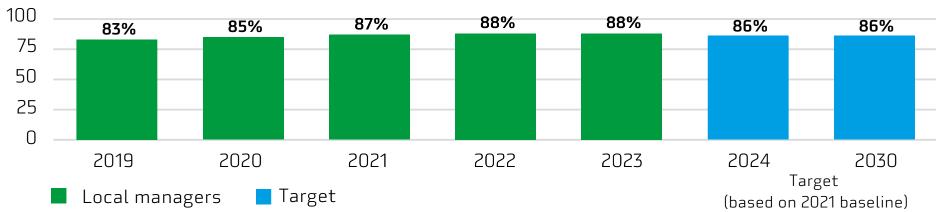
FEMALE MANAGERS

% of headcount managers



LOCAL MANAGERS

% of headcount managers



Besi's diversity efforts indicate slow but steady progress as measured by an increasing percentage of female managers and local managers in the workforce since 2019. However in 2023, Besi reported a decrease in the female managers indicator due to promotion of several male employees to management positions in Besi APac.

National Future Day

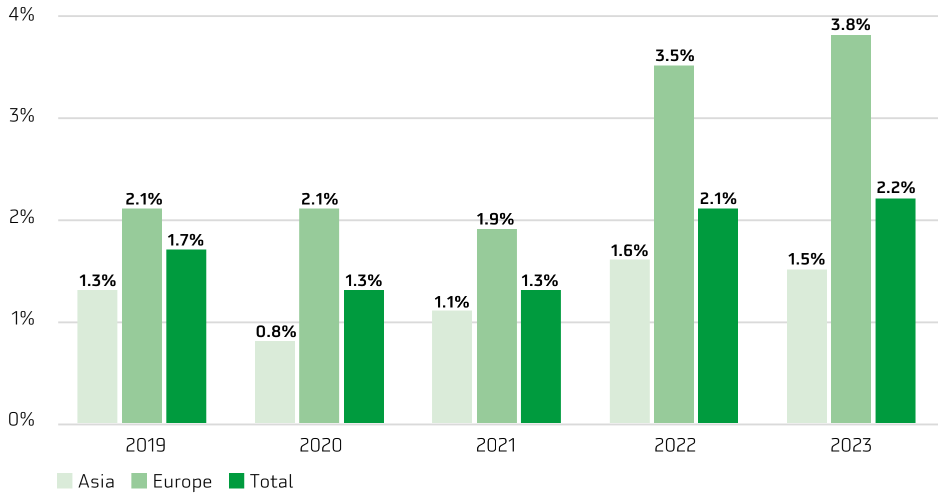
On November 9, 2023, Besi Switzerland participated in National Future Day 2023 which provides schoolchildren insight into gender atypical professions. The objective was to provide schoolchildren with the courage and confidence to take charge of their future outside of gender images. As engineering tends to be an underrepresented female profession, Besi Switzerland showed participants what a career in the semiconductor industry involves and provided tutorials on how to use some of Besi's technology including a course on how to code and use a soldering iron.

Employee health and safety

Employee health and safety represents another material ESG topic. Besi monitors incidents in the workplace at all locations worldwide. Incidents are grouped into categories by severity: (i) fatalities, (ii) major absences (more than four days), (iii) minor absences (less than four days) and (iv) first aid cases in which employees can resume work immediately after treatment or the following day. Safety hazards at Besi are limited. There were three safety incidents recorded last year at Besi's Malaysian and Meco operations of which two were first aid cases and one was a minor absence. In general, incidents are few as our production facilities are predominantly clean environments with no heavy chemicals present. In addition, there were no legal proceedings related to health and safety incidents in 2023. We are committed to be compliant with all local laws. Our facilities in Austria, China, Malaysia, Singapore, Switzerland and our Meco facility in the Netherlands are ISO 45001 compliant. We expect our Duiven, Netherlands facility to be ISO 45001 compliant and certified by the end of 2024.

SICKNESS RATE

% of headcount



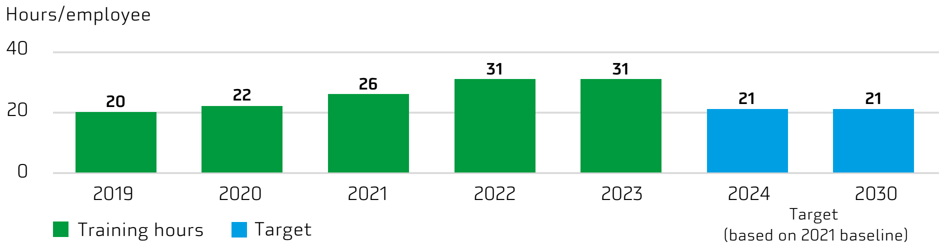
Improved working conditions Besi Leshan

Work began at our Besi Leshan facility to optimize safe working conditions for employees. The facility received ISO 45001 certification in 2023 which represents further external validation of Besi's commitment to occupational health and safety management.

Employee engagement and career development

One of Besi's principal challenges is to attract, motivate and retain skilled workers critical to our success in a highly competitive semiconductor equipment industry. A key component of our strategy is training and talent development for which we provide a variety of educational programs companywide. In addition, we monitor employee engagement and satisfaction across all regional operations and conduct surveys to assess our relative success in such activities. Increases in training hours per employee in 2022 were favorably influenced by a Chinese government sponsored online training program. In 2023, training hours remained roughly equivalent to 2022.

TRAINING



Future priorities

- Improve gender diversity across all locations.
- Maintain the health and safety of all employees including the maintenance of selected COVID-19 protocols related to travel, corporate gatherings and testing.
- Continue to improve Besi's management systems and gain external ISO 45001 certification for all operations by 2024.

RESPONSIBLE BUSINESS

Material issue	2023 progress update versus 2022	2023 progress update versus 2021 base year	2024 targets versus 2021 base year
Ethics and compliance	• No reported violations of Besi's Code of Conduct. • Training provided to all new employees.	• No reported violations of Besi's Code of Conduct. • Training provided to all new employees.	• Increase employee training participation as it relates to Besi's Code of Conduct.
Responsible supply chain	• % of Purchase Volume ("PV") to sign General Work Agreement ("GWA") or General Procurement Contract ("GPC") decreased slightly to 76% versus 77%. • % of PV to sign Conflict Free Sourcing Initiative ("CFSI") signatories decreased to 71% versus 73%. • % of PV compliant with RoHS directive slightly decreased to 93% versus 94%. • % of PV to sign Self-Assessment Questionnaire ("SAQ") as to our Code of Conduct increased to 66% versus 62%. • % of PV audited was 63%, equal to 2022.	• % of Purchase Volume ("PV") to sign General Work Agreement ("GWA") or General Procurement Contract ("GPC") increased to 76% versus 64%. • % of PV to sign CFSI increased to 71% versus 66%. • % of PV compliant with RoHS directive slightly decreased to 93% versus 94%. • % of PV to sign Self-Assessment Questionnaire ("SAQ") as to our Code of Conduct increased to 66% versus 63%. • % of PV audited increased to 63% versus 59%.	• 77% of PV to sign GWA or GPC. • 73% of PV to sign CFSI. • 75% of PV to sign SAQ as to our Code of Conduct. • 70% of PV audited.
Community impact	• Supported various local charities within the regions we operate. • Supported local technical schools through donations of employee time. • Volunteered employee hours to local initiatives.	• 35 employees at our Meco facility in the Netherlands generated € 4,375 in social value in the number of hours volunteered. • Besi Netherlands donated € 7,740 to "'Stichting Kinderen van de Voedselbank". • Besi Leshan provided local schools with 600 hours of community support and donated ¥ 10,000 RMB to a local charity.	• Report on Besi hours volunteered, monetary donations and education projects supported.
Tax practices	• Compliant with tax obligations where factual economic activities take place.	• Compliant with tax obligations where factual economic activities take place.	• Compliant with tax obligations where factual economic activities take place.

SDG alignment

The following SDG aligns with the Responsible Business pillar of Besi's ESG strategy:

Goal/description	How we contribute
16 PEACE AND JUSTICE STRONG INSTITUTIONS — Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.	Besi's ESG policy, Code of Conduct and Whistleblower procedure guide the activities of our employees. Our ESG policy provides a strategic view of Besi's management across the environmental, social and governance aspects of our business related to both our operations and value chain. All new employees are required to sign the Code of Conduct and undertake training upon hiring. All other employees undergo training on a regular basis. Besi's Supplier Code of Conduct outlines the standards expected of our suppliers in areas such as human rights, product quality, health and safety and the environment.

Besi operates in a responsible and sustainable manner for the benefit of all stakeholders. We are committed to the UN Universal Declaration of Human Rights, adhere to high ethical standards and expect the same commitment from key stakeholders, particularly across our supply chain. We strive to have a positive impact on the communities and countries in which we operate via charitable activities, by following responsible tax practices and by maintaining open, constructive and mutually respectful relations with tax authorities. In 2023, the Supervisory Board approved a companywide ESG policy that has been published on our corporate website. This policy outlines the Company's commitment to ethics and corporate culture, engagement with employees and external stakeholders, political involvement, and transparent reporting.

Ethics and compliance

The importance of appropriate anti-corruption and human rights policies has increased with the expansion of Besi's Asian operations, supply chain and logistics activities. In this regard, Besi has an ESG policy, Code of Conduct and Whistleblower procedure (all of which are available on our website) to guide employee activities and to set out the responsibilities, procedures and support functions in reporting violations. In addition, all employees are required to sign our Code of Conduct and undertake training upon hiring. Further, we conduct training for all employees globally on a regular basis. Besi's Code of Conduct also prohibits anti-competitive practices. There were no legal proceedings associated with anti-competitive behavior over the past three years.

Our confidential Whistleblower procedure enables employees to report suspected cases of misconduct. These cases are investigated immediately and overseen by local management and the Board of Management, who have responsibility for approving appropriate corrective measures.

Responsible supply chain

Besi adheres to high ethical standards and expects the same from its suppliers. As such, we have three policies in place to promote a sustainable supply chain: a Conflict Minerals policy, a Supply Chain policy and a Supplier Code of Conduct based on the code published by the Responsible Business Alliance ("RBA"). The Code of Conduct is based on international norms and standards including the Universal Declaration of Human Rights, International Labor Standards and the OECD Guidelines for Multinational Enterprises. Besi's Supply Chain policy and Code of Conduct have been fully in accordance with RBA requirements since 2018. In addition, we seek to align our operations and supply chain with the Restriction of Hazardous Substances ("RoHS") directive. In 2023, 93% of our relevant purchasing volume was compliant with the RoHS directive. In addition, we have begun engagement with suppliers as to the origin of their imported steel and iron supplies due to new EU restrictions.

Besi is committed to improving the sustainability of its supply chain. Our supply chain activities include the sourcing of raw materials, components and semi-finished products from vendors. The issue of conflict minerals is an important topic for supply chain management, particularly in Europe and North America. We seek to minimize the impact of conflict minerals wherever possible. In 2023, Conflict Mineral Reporting Template Questionnaires were returned by suppliers representing 71% of material related purchasing volume, a slight decrease versus the 73% recorded in 2022.

With respect to human rights, we follow the RBA Code of Conduct both in our production facilities and supply chain. Labour standards in the RBA Code of Conduct include:

- Freely chosen employment
- Young workers
- Working hours
- Wages and benefits
- Humane treatment
- Non-discrimination/non-harassment
- Freedom of association

In 2019, Besi achieved gold status with the RBA which is externally audited and accredited.

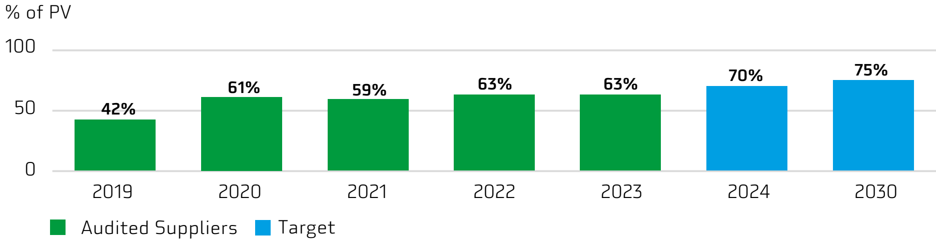
In 2023, 88 suppliers were responsible for approximately 80% of Besi's total purchasing volume. As a result, we established a risk map matrix to assess the importance, reliability, financial condition and sustainability of all suppliers on a more regular basis. Besi evaluates suppliers by means of its quarterly business review process under which we regularly conduct performance reviews and key supplier audits. In 2023, the number of supplier performance reviews and audits was 63% of our total purchasing volume, equal to 2022.

Engagement with suppliers also resulted in additional progress on ESG topics in 2023. Our Malaysian and Chinese operations began a more comprehensive engagement strategy with suppliers this year through an ESG briefing roadshow, training sessions and the sharing of ESG-related knowledge. We also conducted an ESG assessment survey that posed questions related to Besi's material ESG pillars of Environmental Impact, People Wellbeing and Responsible Business. Concerning the Environmental Impact pillar, we asked suppliers whether targets had been set to help reduce Besi's energy usage, carbon emissions, waste and hazardous material usage as well as their usage of renewable energy. Fifty-five suppliers were sent this assessment survey with a response received from forty-six (84%), representing approximately 50% of our total purchasing volume. Such responses were used to create a grading system of either Low Risk, Medium Risk or High Risk. For each risk category, an action plan was created for supplier engagement to ensure improvement in their management of ESG-related issues. Moving forward, Besi will incorporate this ESG scorecard into its periodic audit for annual suppliers.

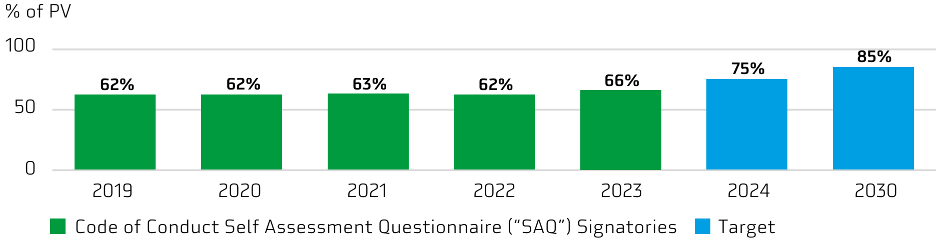
Finally, the percentage of purchasing volume which answered the RBA Code of Conduct Self-Assessment increased from 62% in 2022 to 66% in 2023 marking further progress in our supply chain engagement with Besi's ESG activities.

SUPPLY CHAIN

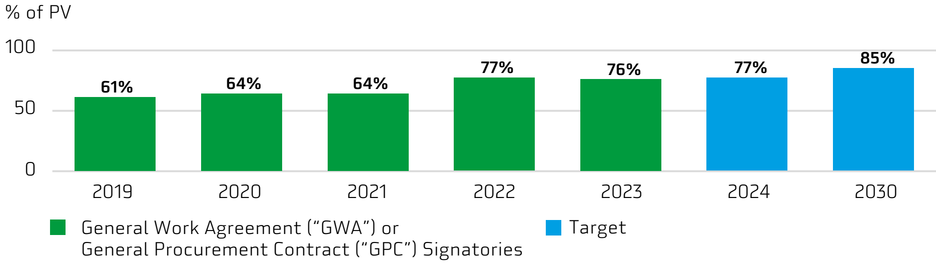
Purchasing Volume ("PV") Audited



Self Assessment Questionnaire

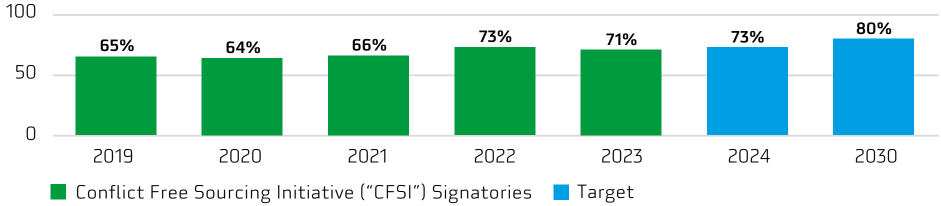


Code of Conduct Supplier Agreements



Conflict Free Sourcing Initiative Signatories

% of PV



Community impact

Besi supports activities in the local communities in which it operates, particularly in Asia where the assistance is more greatly needed. In Malaysia, activities undertaken in 2023 included a tree planting hiking trail in Taman Botani Negara. In addition, Besi's Chinese operations supported their community by providing lectures to Leshan primary school children and by training eight school students for Leshan's vocational school. In total, both initiatives amounted to 600 hours of community support. Besi Leshan also donated ¥ 10,000 RMB to the 'Star Charity' which was endorsed by the Leshan Import and Export Chamber Commerce. The charity raised ¥ 728,000 RMB to provide support to those in poverty.

At Besi Netherlands, we conducted a Christmas promotion to raise funds for *"Stichting Kinderen van de Voedselbank"*, a charity that combats the social consequences of child poverty in the Netherlands. It is the only foundation in the Netherlands that donates clothing packages to children, all of which are new clothes rather than those that have been used and donated. Besi employees managed to raise € 7,740 for this charity. At our Meco facility in the Netherlands, 35 of our employees engaged in community service with a charity called Cello. This program generated € 4,375 in social value through the number of hours volunteered.

Besi Austria supported local technical universities and schools through donations, active interchange and dialogue. In addition, they hosted a Girls Day career orientation project for girls and young women. Points of contact were established between female students for future-oriented professions in the fields of technology, natural sciences, and computer science. Other career orientation days were also held during the year.

On November 9, 2023, Besi Switzerland participated in National Future Day 2023 which provides schoolchildren insight into gender atypical professions. The purpose of the day was to provide schoolchildren with the courage and confidence to take charge of their future outside of gender images. As engineering tends to be an underrepresented female profession, Besi Switzerland showed participants what a career in the semiconductor industry involves and provided tutorials on how to use some of Besi's technology including courses on coding and the use a soldering iron.

Besi APac partnership with the Ideas Academy

Besi APac continued its long-term partnership with the Ideas Academy which provides high quality, affordable virtual education and in-person classes for students in Kuala Lumpur.

Tax practices

Besi's global tax policy views taxation, including the payment and collection of taxes, as an integral part of its business and an important part of its social responsibility and contribution to society. Besi's tax policy is aligned with its ESG Strategy and follows the principle of responsible tax practices whereby Besi's legitimate interests, reputation and corporate social responsibility are taken into consideration. In this respect, the interests of all stakeholders are taken into consideration including customers, shareholders, local governments and the communities and countries in which Besi operates. Besi's global tax policy is annually updated and signed off by the Board of Management.

It consists of the following principles:

- We commit to paying taxes on time and in accordance with all applicable laws and regulations.
- Our tax policy follows Besi's business. As such, our profits are allocated to the countries in which business value is created, taxes are paid and where factual economic activities are executed. In addition, all transactions must have a business rationale.
- Intra-group transactions are entered into on an arm's length basis and adhere to the guidelines issued by the Organization for Economic Co-operation and Development ("OECD").
- We strive to comply with the letter and spirit of applicable tax laws and regulations and are guided by relevant international standards.
- We seek a competitive, stable, sustainable and explainable effective corporate tax rate whereby tax incentives and subsidies are used. Any tax optimization must be based on opportunities provided by law or case law and must be aligned with our business and objectives.
- Besi does not undertake transactions whose sole purpose is to create an abusive tax result. In addition, Besi does not use artificial tax structures in tax haven jurisdictions as defined by the OECD.

- We seek to establish and maintain an open and constructive dialogue with tax authorities and other government bodies in all jurisdictions where we operate based on the disclosure of all relevant facts and circumstances. We discuss important fiscal aspects upfront with the relevant tax authorities if questions arise as to proper taxation policy. We also seek rulings from tax authorities to confirm the applicable treatment. In the Netherlands and Switzerland, jurisdictions where Besi has substantial operations, we engage with the Tax Authorities through regular meetings, telephone calls and other correspondence.

The effective tax rate for 2023 was 14.7% (2022: 12.6%). Similar to 2022, income tax expense for the 2023 fiscal year was affected by foreign tax rates differentials, non-deductible expenses, tax-exempt income, tax credits, changes in valuation allowances on deferred tax assets and benefits from preferential tax regimes legislated by the countries concerned in order to promote economic development and investment. Further details regarding income tax expense are provided in Note 29 to the Consolidated Financial Statements.

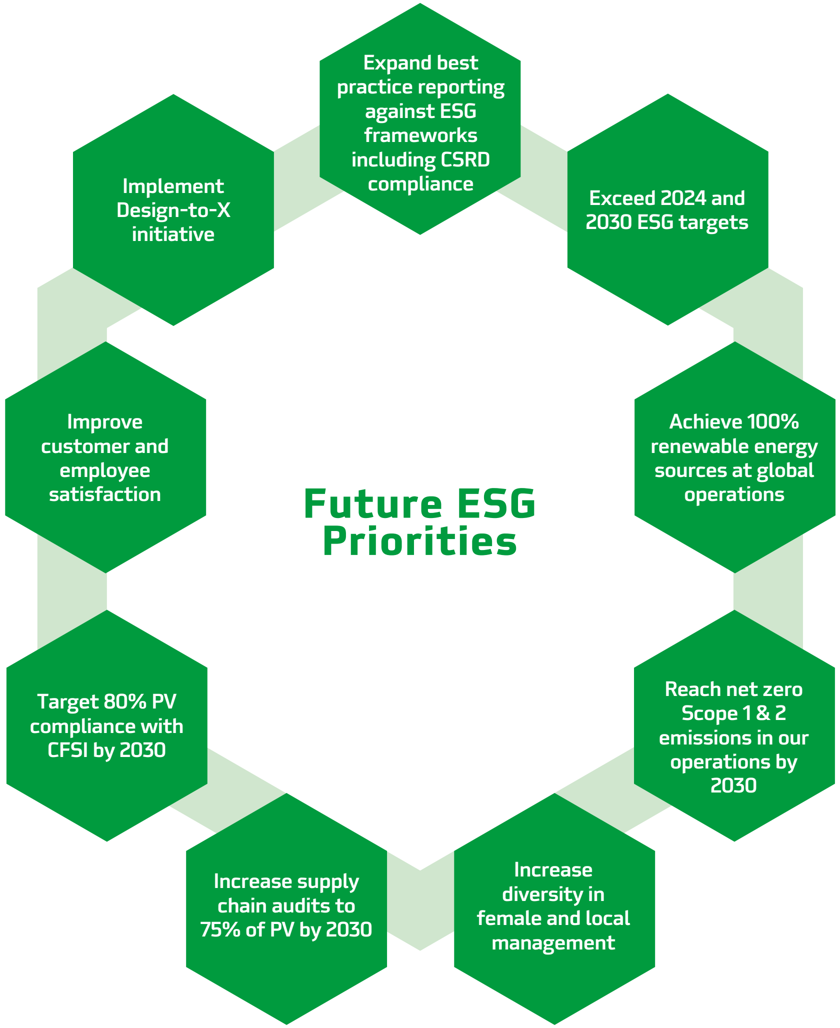
Future Responsible Business priorities

- Conduct supply chain audits representing 75% of Besi's purchasing volume by 2030 in accordance with our new supply chain risk matrix.
- Enhance our supplier evaluation process in the areas of lead time, quality and technological capabilities.
- Encourage more suppliers to join the CFSI such that 80% of Besi's purchasing volume has signed by 2030.

Besi's future ESG priorities

Besi's mission is to become the world's leading supplier of semiconductor assembly equipment for advanced packaging applications and to exceed industry average benchmarks of financial performance. We also strive to create long-term value for our stakeholders and operate our business in a sustainable way, respecting the environment, our own employees and the wider society. Besi is committed to running its operations in accordance with internationally recognized standards and best practices and to promote sustainability with all stakeholders through the reporting on material ESG topics on an annual basis in line with regulatory standards.

Our key objectives include the priorities set forth in the chart below:



Risk Management

Risk Management

Besi's risk management program seeks to identify and control potential (fraud) risks and events which may affect Besi's strategy, continuity, business and performance. Our efforts extend throughout our processes, management, employees and systems and are the subject of continuous focus. In recent years, the importance of internal control and risk management systems has grown substantially as a result of Besi's increased size and complexity, changing market conditions and expansion of our global business operations. Besi's internal control and risk management systems have been designed to address and help mitigate such risks and risk factors.

RISK MANAGEMENT PROCESS

In 2023, the most important components of Besi's internal control and risk management system to manage and mitigate our risks were:

- An extensive and documented process for preparing Besi's annual budget, quarterly estimates and reports of its monthly financial and non-financial information compared with the budgeted and quarterly estimated information.
- Monthly business reviews with product group and production site managers with respect to their monthly and quarterly bookings, revenue, working capital and results of operations, together with discussions of general market, economic, technological, ESG and competitive developments.
- Daily reviews of the foreign currency positions of all significant operating companies.
- Annual documentation and analysis of key risks and the development and control of such risks.
- Weekly management reviews of Besi's business, operations, cash, supply chain and inventory development.
- Compliance with finance and controlling guidelines governing our financial accounting and reporting procedures.
- Compliance with internal controls over financial reporting that have been implemented at all significant operating companies.
- Monthly, quarterly and annual reviews of Besi's ESG performance, risks and risk management and its progress versus KPIs.
- Regular management review of key staff development.
- Regular analyses of operational risks at the subsidiary level.
- Regular analyses of Besi's capital structure, financing requirements, cash and short-term deposits, tax position and transfer pricing system.

Operational risks such as the hedging of financial exposures, internal financial reporting and transfer pricing are governed by a set of internal Besi guidelines. In addition, insurance policies are in place to cover the typical business risks associated with Besi's operations and are reviewed every year. Besi's policies regarding foreign currency hedging, interest rate, credit, market and liquidity risks are further described in the Financial Statements.

Integration of a risk-conscious culture as part of managing our business

Risk identification	Risk measurement	Risk management	Monitoring risk activities	Risk reporting
• Business risks identified as a result of dialogue with senior management. • Alignment of risk categories with Value Creation Model. • Risk categories and underlying risks reviewed bi-annually with the Board of Management. • Explicit risk ownership assigned.	• Risk appetite discussed with and determined by the Board of Management. • Standard risk management methodology established for risk categories and underlying risks.	• Mitigation actions (controls) are established for all risks identified. • Action plans are established when controls are needed for risk mitigation efforts. • Explicit mitigation controls and responsibilities assigned for action plan execution.	• Effectiveness of mitigation actions (controls) and action plan status are monitored across three lines of defence. • Internal audit reviews risk management effectiveness and drives improvements.	• Bi-annual reporting to the Board of Management and Supervisory Board of top 10 risk categories, underlying risks and effectiveness of mitigation actions. • Risk management framework and cycle improvements are reported and approved by the Board of Management.

In addition, our use of global and diverse information technology systems could expose our IT security, data resources and intellectual property to a variety of security risks as a result of natural disasters, power outages, cyberattacks, acts of terrorism and malware and/or ransomware infiltration. In response, we have established an information-security program which implements measures to prevent, detect and respond to security threats. Such measures and tools include, among others, vulnerability management tools, access control management, log management, advanced malware protection, perimeter network defense and endpoint detection and response tools. We have also implemented incident response procedures and a disaster recovery plan which are regularly reviewed and updated. On an annual basis, limited and focused cyber maturity assessments are performed by an external party. In recent years, we also have significantly raised awareness among our employees of the risks and potential risks of cybercrime by annual mandatory cyber awareness training.

Besi also evaluates non-financial risks which could affect both its strategy and business operations including emerging risks such as (i) climate change, natural resource conservation and pollution and (ii) human resources challenges, such as diversity, human rights and the recruitment of qualified technical personnel. Non-financial risks are governed by a set of internal and external guidelines and instructions. Short- and long-term topics are assessed through measures such as materiality analyses, key performance indicators for Scope 1, 2 and 3 emissions, water, energy and waste, customer and employee satisfaction metrics, supplier audits and continuous stakeholder dialogue.

Risk governance

The Board of Management is responsible for (i) the management of internal and external risks associated with our business activities and (ii) compliance with applicable legislation and regulations. The management team is responsible for the monitoring and reporting of identified risks as well as leading the response across the organization related to any new risks which may arise.

All material findings that result from the use of Besi's internal control and risk management system for financial and non-financial risks are discussed with the Audit Committee as part of the Supervisory Board on a quarterly or half yearly basis, including:

- Development of Besi's revenue, orders, results of operations and balance sheet versus budget as well as developments in the global economy and semiconductor assembly equipment market and their impact on Besi's financial results.
- Progress of ongoing strategic initiatives and cost reduction efforts.
- Status of key customer relationships.
- Analysis of orders lost to competitors and the development of Besi's competitors' businesses.
- Material developments in Besi's research and development activities.
- Impacts of actual or potential inflationary pressures, interest rate and risk premium adjustments and global macroeconomic conditions.
- Foreign currency exchange rate developments.
- Status of Besi's current corporate governance procedures.
- Status of systems, procedures and activities to monitor and evaluate risks from fraud, bribery or corruption in Besi's operations.
- Cyber security threats and risk remediation related thereto.
- Climate change exposures.
- ESG related KPIs and progress versus targets.

In addition to internal controls over financial reporting, the operation of Besi's internal control system is also assessed by the external auditor if deemed relevant in the context of the audit of the annual Financial Statements. The results of this audit are discussed with the Board of Management and the Audit Committee of the Supervisory Board.

There were no indications that Besi's internal control and risk management systems did not function properly in 2023. Please refer to Internal Control and Risk Management of the Corporate Governance section for further information.

Risk universe

Besi's risk universe can be classified as follows:

Strategic

General

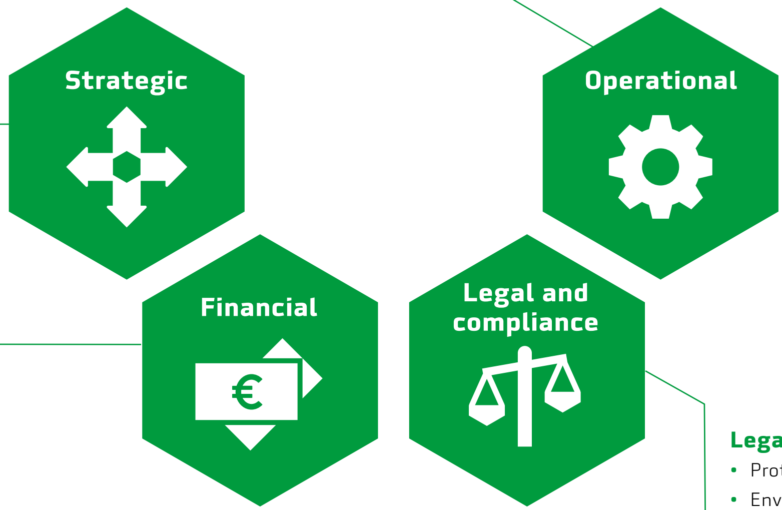
- General market conditions
- Trade, political and economic frictions
- Significant operations in Europe
- Supply chain or other manufacturing disruptions
- Impacts from the COVID-19 or future pandemics
- Impact of climate change
- Acts of war or terrorism
- Acquisitions

Semiconductor industry related

- Cyclical and seasonal nature of demand for semiconductors
- Timely new product introductions
- Timing of sales cycle
- Competition
- Price competition
- Industry consolidation

Operational

- Inventory shortages or surpluses
- Dependence on suppliers for timely delivery of critical components
- Undetected problems in products
- Use of global and diverse IT systems
- Recruitment and retention of qualified personnel
- Disruption in operations
- Impacts of the prolonged Ukraine/Russia conflict or Israel/Hamas conflict
- Dependence on international operations
- Usage of conflict minerals in supply chain
- Corruption and human rights in the Asian Pacific region



Financial

- Fluctuation in quarterly and annual financial results
- Seasonal and cyclical order volatility
- Timely adjustment of costs and overhead levels to fluctuating market conditions
- Customer concentration
- Impacts of actual or potential inflationary pressures and interest rate and risk premium adjustments
- Currency exchange rate volatility
- Variability of dividend per annum

Legal and compliance

- Protection of intellectual property
- Environmental rules and regulations
- Unethical behavior and non-compliance with Besi's Code of Conduct
- Anti-takeover provisions contained in Besi's articles of association

Besi does not rank the individual risks identified by management in its risk universe. We believe that all risks described herein have significant relevance and that a ranking process would negate the purpose of a comprehensive risk assessment.

Risk appetite

Besi's risk appetite is primarily based on defined and agreed upon strategies and the individual objectives and initiatives within such strategies. Management believes that Besi's risk appetite is aligned with its strategy and priorities. The Board of Management monitors the operation of its internal control and risk management systems and carries out a systematic assessment of its design and effectiveness at which time it also assesses its risks, including residual risks, net of risk mitigation measures. The Board of Management discusses the effectiveness of the design and operation of Besi's internal control and risk management system with the Audit Committee and provides input to the Supervisory Board as to the status of specific risk management initiatives.

Our risk appetite differs per risk type:

Risk category	Risk appetite
Strategic risks and risks related to the semiconductor industry	Besi seeks to realize its strategic ambitions and priorities and is willing to accept reasonable risks to achieve such objectives.
Operational risks	Besi has a variety of operating initiatives and challenges in its strategic planning that require an appropriate level of management attention. We seek to mitigate risks that could negatively affect our realization of operating initiatives and efficiency targets while ensuring that our quality standards are unaffected in the process.
Financial risks	Besi's financial strategy is focused on generating increased revenue, profit and cash flow from its business model, maintaining a strong financial position and creating long-term value for shareholders. We seek to mitigate risks which could negatively influence our results of operations, financial condition and access to capital markets while maintaining optimal operating and financing flexibility and an attractive capital allocation policy for the benefit of stakeholders.
Legal and compliance risks	Besi strives to be fully compliant with its Code of Conduct and all applicable national and international laws and regulations in the markets and jurisdictions in which it operates. In addition, we seek to comply with all environmental and labor laws and use our best efforts to comply with best practice standards in the jurisdictions in which Besi operates.

Risk factors

We confront many risks in conducting our business that may limit our ability to realize Besi's business objectives. We assess our risk exposure by referencing the four risk categories comprising Besi's risk universe. Any of the specific risks which form a part of such categories have the potential to materially and adversely affect our business, financial condition, results of operations and reputation. In addition, there may exist some risks currently which are not yet known to us or risks deemed immaterial at present which could become material in the future. Many of the risks described below may be exacerbated by impacts from the prolonged Ukraine/Russia conflict and the Israel/Hamas conflict, increased weather events caused by climate change and any worsening of global business and economic conditions.

Strategic risks

Besi's business and results of operations may be negatively affected by general economic and financial market conditions and volatile spending patterns by its customers.

Although the semiconductor industry's business cycle can be independent of the general economy, global economic conditions often have a direct impact on demand for semiconductor devices and ultimately demand for semiconductor manufacturing equipment. Accordingly, Besi's business and financial performance are affected, both positively and negatively, by fluctuations in the macroeconomic environment. As a result, the Company's visibility as to future demand is generally limited and its ability to forecast future demand is difficult.

For example, an abrupt decline in demand for mobile applications (in particular order cancellations by a single IDM customer) in 2018 caused second quarter 2018 orders to decline by 58% relative to the first quarter of 2018. Such order weakness continued in the second half of 2018 and throughout 2019 as customers digested significant capacity added in 2017. Conversely, in both 2017 and 2021, orders grew by 82.2% and 98.9%, respectively, versus the respective prior year reflecting broad based and rapid industry upturns with capacity increases experienced in each of Besi's principal end-user markets.

Besi believes that historic volatility in capital spending by customers is likely to persist in the future. In addition, future economic downturns and/or geopolitical events could adversely affect Besi's customers and suppliers which would in turn have an impact on Besi's business and financial condition.

Trade, political and economic frictions could adversely affect Besi's revenue and results of operations.

Due to the complex relationships among the European Union, China, Japan, Korea, Taiwan and North America, there is inherent risk that political and diplomatic influences might lead to trade disruptions. In particular, heightened trade tensions, retaliatory tariffs and intellectual property transfer issues between North America and China in recent years could potentially limit or restrict the sale of Besi's semiconductor assembly equipment to China. In addition, increased global tensions have also occurred due to China's challenges to Taiwan's independent governance status as well as Taiwan's increasing importance to the global supply chain of advanced semiconductor devices. A significant trade disruption in any area where we do business could have a material adverse impact on our future revenue and profitability. Tariffs, additional taxes or trade barriers may increase our manufacturing costs, decrease margins, reduce the competitiveness of our products or inhibit Besi's ability to sell products or purchase necessary equipment and supplies, all of which could have a material adverse effect on our business, results of operations and financial condition.

In addition, there are risks that governments may, among other things, insist on the use of local suppliers, compel companies to partner with local companies to design and supply equipment on a local basis, require the transfer of intellectual property rights and/or local manufacturing or provide special incentives to government backed local customers to buy from local competitors even if their products are inferior to ours, all of which could adversely impact our revenue, margins and financial condition. Many of these challenges are particularly applicable in China, which is a fast-developing market for the semiconductor equipment industry and an area of anticipated growth for Besi's business. Further, the political and economic climate in China at both the national and regional levels can be fluid and unpredictable. China has implemented state-sponsored initiatives to build domestic semiconductor capacity and supply chains. In addition, North America and the European Union have adopted legislation to provide government funding for semiconductor manufacturing expansions in their respective regions, but there is uncertainty as to the amounts and timing of funding and as to any restrictions on recipients. As such, Besi may be at a disadvantage in competing with entities participating in such government efforts based on their lower cost of capital, access to government subsidies and decision making, preferential sourcing practices and stronger local relationships or otherwise.

Besi's business includes significant operations in Europe. Disruptions to European economies could have a material adverse effect on Besi's operations, financial performance, share price and access to credit.

Given the scale of its European operations and scope of its relationships with customers and counterparties, Besi's results of operations and financial condition could be materially and adversely affected by persistent disruptions in European financial and commodity markets, the attempt of a country to abandon the euro, the impact of a prolonged Ukraine/ Russia conflict or Israel/Hamas conflict, the failure of a significant European financial institution, even if not an immediate counterparty to Besi, persistent weakness in the value of the euro and the potential adverse impact on global economic growth and capital markets if eurozone issues spread to other parts of the world as a result of the default of a eurozone sovereign or corporate issuer.

Supply chain disruptions or other manufacturing interruptions or delays could affect Besi's ability to meet customer demand on a timely basis or lead to higher costs.

Besi's business depends on its timely supply of equipment, services and related products to meet the changing technical and volume requirements of its customers, which depends in part on the timely delivery of parts, materials and services, including components and subassemblies, from suppliers and contract manufacturers. Significant and sudden increases in demand for Besi's products, as well as worldwide demand for electronic products, have resulted in, and may continue to result in, a shortage of parts, materials and services needed to manufacture Besi's products. Such shortages, as well as delays in and the unpredictability of shipments due to transportation interruptions, have adversely impacted, and may continue to adversely impact, our suppliers' ability to meet our demand requirements. Difficulties in obtaining sufficient and timely supplies of parts, materials or services and delays in and the unpredictability of shipments due to transportation interruptions, have adversely impacted, and may continue to adversely impact, Besi's manufacturing operations and its ability to meet customer demand. Some key parts, components and sub-assemblies are subject to long lead times or are available only from a single supplier or limited group of suppliers, and some sourcing or subassembly is provided by suppliers located in countries other than the countries where Besi conducts its manufacturing. Volatility of demand for manufacturing equipment can increase capital, technical, operational and other risks for Besi and for companies throughout its supply chain and may cause some suppliers to exit businesses, or scale back or cease operations, which could also impact our ability to meet customer demand.

Besi may also experience significant interruptions to its manufacturing operations, delays in its ability to deliver or install products or services, increased costs or customer order cancellations as a result of:

- Volatility in the availability and cost of parts, materials or services, including rising prices due to inflation.
- Difficulties or delays in obtaining required import or export approvals.
- Shipment delays due to transportation interruptions or capacity constraints.
- A worldwide shortage of semiconductor components as a result of sharp increases in demand for semiconductor products in general.
- Information technology or infrastructure failures, including those of a third-party supplier or service provider.

Besi faces risks related to COVID-19 and global pandemics that could significantly disrupt or materially adversely affect its business and financial performance.
The COVID-19 pandemic had a significant adverse impact on global supply chains and commercial activity over the past four years. The pandemic also had a sustained adverse impact on economic and market conditions and limited global economic growth for a prolonged period of time, all of which adversely affected spending on semiconductor manufacturing equipment, semiconductor supply chains and cycle times, demand for Besi's product offerings and Besi's business and operating results.

Significant uncertainty exists as well concerning the impact of any new COVID-19 variants on the business and operations of Besi's customers and their supply chain ecosystems. Besi's revenue may be negatively impacted in future periods by its ability to source components and make timely customer deliveries and complete orders. Furthermore, some of Besi's customers could also experience significant adverse effects from supply chain shortages as a result of a pandemic which could adversely affect the timing of orders placed with us and/or accepted by them. In addition, any future pandemic could adversely impact semiconductor and global supply chains and result in labor shortages, inflationary pressures and increased transportation/logistics costs. As a result, the financial projections Besi uses as the basis for estimates and assumptions used in its quarterly financial statements could be adversely affected by any further volatility in these uncertainties.

Considerable uncertainty still surrounds the potential long-term economic effects of the COVID-19 pandemic. Although Besi continues to actively monitor the situation across its operations and may take further actions as required by government authorities or as more information becomes available, the full extent to which COVID-19, variants thereof or any future pandemic may have on our business and operating results, manufacturing operations, delivery lead times, sourcing of components and customer service efforts and our customers, suppliers and employees, remains highly uncertain.

Besi may be materially and adversely affected by the impact of climate change including laws and regulations implemented in response to climate change related issues.
Besi's business and operations, and those of its customers and suppliers, can be disrupted by acute and chronic physical risks from climate change. Acute physical risks refer to those that are event-driven, including natural disasters, interruptions of service from utilities or other catastrophic events that may be exacerbated by climate change. Chronic physical risks refer to natural disasters occurring more frequently with greater intensity and less predictability in all regions of the world. Catastrophic events such as earthquakes, floods, hurricanes, drought and tornadoes could make it difficult or impossible to manufacture or deliver products to Besi's customers, receive materials from Besi's suppliers or perform critical functions whether on a timely basis or at all, which could adversely affect our revenue, operating costs, employee productivity and/or existing assets. Furthermore, if our customers or suppliers cannot timely resume their own operations due to a catastrophic event, we may be unable to fulfill customer orders and/or experience reduced or cancelled orders even if Besi's operations are marginally affected. For example, in September 2023, territories in the East Asian monsoon region, including Guangdong, Hong Kong, Fujian and Taiwan, experienced significant typhoons and storm surges, resulting in disruptions to business operations. Such disruptions impacted some of the semiconductor factories and suppliers that operate in the region. The long-term effects of climate change on the global economy, and the semiconductor industry in particular, are unclear but could be severe.

Compliance with existing or future climate-related land use, energy, environmental and other laws and regulations may: (i) result in significant costs to Besi for additional capital equipment or other process requirements, (ii) restrict the ability to expand our operations and/or (iii) cause Besi to curtail its operations. Besi also could incur significant costs, including fines or other sanctions and third-party claims, as a result of violations of, or liabilities under, such laws and regulations. In addition to regulatory compliance, increasing customer sustainability requirements as well as Besi's own internal targets, could cause us to alter our manufacturing, operations or equipment designs from time to time and incur substantial expense to satisfy such increased regulatory and sustainability requirements. To the extent that higher costs result in higher prices for our products, Besi may experience a reduction in the demand for such products, which could negatively affect our results of operations. Conversely, Besi may not be able to pass such increased costs through to customers in the form of higher prices, as a result of which our results of operations may also be adversely affected. Any failure to comply with or meet such climate change related regulations, customer requirements or sustainability targets could adversely impact the demand for Besi's products and subject us to significant costs and liabilities and reputational risks that could adversely affect our business, financial condition and results of operations.

Acts of war or terrorism could adversely affect Besi's business and results of operations.
Threats or acts of war or terrorism may adversely affect our business. Terrorist attacks in Europe and other regions globally as well as continuing hostilities in the Middle East, Ukraine and elsewhere have created significant instability and uncertainty in the world. In addition, terrorist attacks, including cyberterrorism, that directly impact our employees and facilities or those of our suppliers or customers could have an adverse impact on our sales, supply chain, production capabilities and costs. Any such event could have a material adverse effect on world markets, our business and our results of operations.

Besi may acquire or make investments in companies or technologies that could disrupt its ongoing business, distract its management and employees, increase its expenses and adversely affect its results of operations.

As part of its growth strategy, Besi may acquire or make investments in companies and technologies from time to time. Besi could face difficulties in integrating personnel and operations from the acquired businesses or technology and in retaining and motivating key personnel from such businesses. In addition, these acquisitions may disrupt Besi's ongoing operations, divert management resources and attention from day-to-day activities, increase its expenses and adversely affect its results of operations and the market price of its ordinary shares. In addition, these transactions often result in charges to earnings for items such as business unit restructuring, including charges for personnel and facility termination and the amortization of intangible assets or in-process research and development expenses. Any future acquisitions or investments in companies or technologies could involve other risks including the assumption of additional liabilities, dilutive issuances of equity securities, the utilization of cash and the incurrence of debt.

Semiconductor industry related risks

Besi's revenue and results of operations depend in significant part on demand for semiconductors which is highly cyclical and has increasingly become more seasonal in nature.

Capital expenditures for semiconductor manufacturing equipment depend on the current and anticipated market demand for semiconductors and products using semiconductors. The semiconductor industry is highly cyclical and volatile and is characterized by periods of rapid growth followed by industry-wide retrenchment. These periodic downturns have included, among other things, diminished product demand, production overcapacity, oversupply and reduced prices, all of which have been regularly associated with substantial reductions in capital expenditures for semiconductor facilities and equipment and a reduction of Besi's revenue.

Over the past decade, Besi has experienced significant upward and downward movements in quarterly order rates due to global macroeconomic concerns, the timing of industry capacity additions and seasonality associated with end-user application revenue which materially affected and, in certain instances, materially adversely affected its revenue, results of operations and orders. Customer order patterns have become increasingly more seasonal due to the growing influence of more retail-oriented electronics applications in the overall demand for semiconductor devices such as smartphones, tablets, wearables, infotainment, gaming and automotive electronics and the timing of new product introductions. As such, typical annual order patterns have been characterized by a strong ramp in the first half of the year to build capacity to meet anticipated year end demand followed by a subsequent decline in the second half of the year as capacity additions are digested by customers.

Due to the lead times associated with the production of semiconductor equipment, a rise or fall in the level of sales of semiconductor equipment typically lags any downturn or recovery in the semiconductor market by approximately three to six months. This cyclicality has had, and is expected to continue to have, a direct adverse effect on Besi's revenue, results of operations and orders. Industry downturns can be severe and protracted and will continue to adversely affect Besi's revenue, results of operations and orders.

Besi must introduce new products in a timely fashion and its success is dependent upon the market acceptance of such products.

The semiconductor equipment industry is subject to rapid technological change and new product introductions and enhancements. The success of Besi's business strategy and results of operations are largely based upon accurate anticipation of customer and market requirements. Besi's ability to implement its overall strategy and remain competitive will depend in part upon its ability to develop new and enhanced products and introduce them at competitive price levels in order to gain market acceptance. Besi must also accurately forecast commercial and technical trends in the semiconductor industry so that its products provide the functions required by its customers and are configured appropriately for use in their facilities. Besi may not be able to respond effectively to technological changes or to specific product announcements by competitors. As a result, the introduction of new products embodying new technologies or the emergence of new or enhanced industry standards could render Besi's existing products uncompetitive from a pricing standpoint, obsolete or unmarketable.

In addition, Besi is required to invest significant financial resources in the development of new products or upgrades to existing products and sales and marketing efforts before such products are made commercially available and before Besi is able to determine whether they will be accepted by the market. Revenue from such products will not be recognized until long after Besi has incurred the development costs associated with designing, creating and selling such products. In addition, a customer may cancel or modify a product order before or during Besi's manufacturing process and before it receives revenue from the customer. While Besi typically imposes a fee when its customers cancel an order, that fee may not be sufficient to offset costs incurred to design and manufacture such product. In addition, the customer may refuse to pay the cancellation fee. It is difficult to predict with any certainty the frequency with which customers will cancel or modify their orders or the effect that any cancellation or modification would have on Besi's results of operations.

Because of the lengthy and unpredictable sales cycle for its products, Besi may not succeed in closing transactions on a timely basis, if at all, which could adversely affect its revenue and operating results.

The sales cycle for Besi's systems are often lengthy and unpredictable due to the technological sophistication of its products and premium prices related thereto. Factors affecting the sales cycle include:
- General economic conditions.
- Customers' capital spending plans, capacity utilization rates, technology roadmaps and budgetary constraints.
- Timing related to the adoption, testing, qualification and introduction of new devices and process technologies and related equipment.
- The timing of customers' budget cycles.
- Customers' internal approval processes.

Lengthy sales cycles may cause Besi's revenue and results of operations to vary from period to period and it may be difficult to predict the timing and amount of any variations. Besi may not succeed in closing such large transactions on a timely basis or at all, which could cause significant variability in its revenue and results of operations for any particular period.

Besi may fail to compete effectively in its markets.

Besi faces substantial competition on a worldwide basis from established companies based in Japan, Korea, Singapore, China, various other Asia Pacific countries and North America, which may have greater financial, engineering, manufacturing and marketing resources than Besi. Besi believes that once a semiconductor manufacturer has decided to buy semiconductor assembly equipment from a particular vendor, the manufacturer often continues to use that vendor's equipment in the future. Accordingly, it is often difficult to achieve significant sales to a particular customer once another vendor's products have been installed. Furthermore, some companies have historically developed, manufactured and installed assembly equipment internally, and it may be difficult for Besi to sell its products to these companies or, in attempting to make sales to such companies, risk exposing Besi's proprietary technology to a potential competitor.

Besi's ability to compete successfully in its markets depends on a number of factors both within and outside its control including:
- Price, product quality and system performance to customer specifications.
- Ease of use and reliability of its products.
- Manufacturing lead times, including the lead times of Besi's subcontractors.
- Cost of ownership.
- Success in developing or otherwise introducing new products.
- Market and economic conditions.
- Local market presence, particularly in Asian markets, and the quality of Besi's after-market sales and service support in each region in which it operates.
- Ability to attract and retain qualified personnel, particularly in Asia.

If Besi fails to compete effectively based upon these or other factors, its business and results of operations could be adversely affected.

Besi may experience increased price pressure on its product sales.

Besi's ability to maintain pricing levels for its systems depends, in part, on its ability to continually develop and introduce new products and next generations of its principal products on a timely basis. In addition, pricing discipline has been aided by the successful execution of cost reduction initiatives including the consolidation and transfer of production operations to lower cost areas, expansion of its lower cost Asian supply chain, flexible Asian production workforce and ongoing structural overhead reduction. The failure of new product development and/or cost reduction efforts could limit Besi's ability to offset future pricing pressure, and, as such, could materially and adversely affect Besi's financial condition and operating results.

Recent consolidation activity and industry alliances in the semiconductor industry have further increased customer concentration and the risk of loss.

There has been, and Besi expects that there will continue to be, consolidation within the semiconductor industry resulting in fewer potential customers for its products and services. In addition, and, perhaps more significantly, industry consolidation could result in the potential loss of business from existing customers that are a party to a merger if the combined entity decides to purchase all of its equipment from one of Besi's competitors. Further industry consolidation could result in additional negative consequences to Besi including increased pricing pressure, increased customer demands for enhanced or new products, greater sales and promotional costs and the potential for increased oversight from regulatory agencies. Any of the foregoing events would have an adverse impact on Besi's business, results of operations and financial condition.

Some of our customers and potential customers are entering into alliances or other forms of cooperation with one another to expedite the development of processes and other manufacturing technologies. One of the results of this cooperation may be the definition of a system or particular tool set for a certain function or a series of process steps that uses a specific set of manufacturing equipment. These decisions could work to Besi's disadvantage if a competitor's equipment becomes the standard equipment for such function or process. Even if Besi's equipment was previously used by a customer, that equipment may be displaced in current and future applications by the equipment standardized through such cooperation. These forms of cooperation may have a material adverse effect on Besi's business, financial condition and results of operations.

In addition, various industries have experienced consolidation and other ownership changes or the emergence of dominant firms and supply chains within those industries, including the mobile smartphone, computing and automotive industries. Any future changes in market structure to industries in which we sell our equipment could decrease the number of potential customers for our product offerings and/or risk an increase in competition for our clients' equipment purchases. Moreover, our competitors may respond to such changes in market conditions by lowering prices and attempting to lure away our customers.

Operational risks

Difficulties in forecasting demand for Besi's products may lead to periodic inventory shortages or surpluses.

Besi typically operates its business with limited visibility of future demand. As a result, it sometimes experiences inventory shortages or surpluses. Besi generally orders supplies and otherwise plans production based on internal forecasts for demand. During the COVID-19 pandemic, we held larger quantities of critical components and parts in inventory to help ensure timely deliveries to customers. Besi has in the past failed, and may fail again in the future, to accurately forecast demand for its products. This has led to, and may in the future lead to, delays in product shipments or, alternatively, an increased risk of inventory obsolescence. If it fails to accurately forecast demand for its products, Besi's business, results of operations and financial condition may be materially and adversely affected.

Besi depends on its suppliers for critical raw materials, components and subassemblies on a timely basis. If suppliers do not deliver their products on a timely basis, particularly during a large order ramp, our revenue, customer relationships and market share could be materially and adversely affected.

Besi's assembly equipment, particularly its advanced packaging systems, is highly complex and requires raw materials, components, modules and subassemblies having a high degree of reliability, accuracy and performance. Besi relies on subcontractors to manufacture most of these components and subassemblies (and, in certain instances, on sole suppliers for such items) on a timely basis as our order ramps can be steep and cycle times relatively short. As a result, Besi is exposed to a number of significant risks including:

- Increased outsourcing of Besi's manufacturing process including modules and subassemblies produced by subcontractors.
- Shortages caused by disruptions at our suppliers and subcontractors for a variety of reasons including work stoppage or fire, earthquake, flooding or other natural disasters.
- Changes in our manufacturing processes in response to changes in the market, which may delay our shipments.
- Potential for inadvertent use of defective, contaminated or conflict mineral raw materials.
- Relatively small operations and limited manufacturing resources of some of our suppliers which may limit their ability to manufacture and sell subassemblies, modules, components or parts in the volumes Besi requires and at acceptable quality levels, prices and delivery timetables.
- Potential inability of suppliers to meet customer demand requirements during volatile cycles.
- Reliability or quality issues with certain key components, modules and subassemblies provided by single source suppliers as to which Besi may not have any short-term alternative.
- Delays in the delivery of raw materials, modules or subassemblies, which, in turn, may delay shipments to our customers.
- Loss of suppliers as a result of industry consolidation, bankruptcy or insolvency.
- Potential copying or theft of proprietary designs for unauthorized use or sale to third parties including competitors.

If Besi were unable to deliver products to its customers on time and at expected costs for these or any other reasons, or it were unable to meet customer expectations as to cycle time, or it were unable to maintain acceptable product quality or reliability, then its business relationships, market share, financial condition and operating results could be materially and adversely affected.

Undetected problems in Besi's products could directly impair its financial results.

If flaws in the design, production, assembly or testing of its products (by Besi or its suppliers) were to occur, we could experience a rate of failure in our products that could result in substantial repair, replacement or service costs and potential damage to Besi's reputation. Continued improvements in manufacturing capabilities, controls of material and manufacturing quality and costs and product testing are critical factors to Besi's future growth. There can be no assurance that our efforts to monitor, develop, modify and implement appropriate tests and manufacturing processes for Besi's products will be sufficient to permit us to avoid a rate of product failure that results in substantial delays in shipments, repair, replacement or service costs and/or potential damage to our reputation, any of which could have a material adverse effect on Besi's business, results of operations and financial condition.

The costs of product defects and errata (deviations from product specifications) due to, for example, problems in Besi's design and manufacturing processes could include:

- Writing off the value of inventory.
- Disposing of products that cannot be fixed.
- Retrofitting products that have been shipped.
- Providing product replacements or modifications.
- Defending against litigation.

Besi's use of global and diverse information technology systems could result in ineffective or inefficient business management and could expose it to security threats to its data resources and intellectual property.

Besi currently utilizes a variety of information technology ("IT") systems to run its global operations. At present, Besi's operations rely on a range of different software systems to manage sales, administrative and production functions. Some of these systems are proprietary and others are purchased from third party vendors. In addition, some of these systems are maintained on-site by Besi personnel while others are maintained off-site by third parties.

We maintain and rely extensively on IT systems and network infrastructure for the effective operation of our business and protection of technological resources. We also hold large amounts of data in data center facilities around the world upon which our business depends. We could experience a disruption or failure of our systems, or of the third-party hosting facilities or other services that we use. Such disruptions, failures or threats could include a major earthquake, flood, fire, cyber-attack, act of terrorism, ransomware or other catastrophic event as well as power outages or telecommunications infrastructure outages or a decision by one of our third-party service providers to close facilities that we use without adequate notice or other unanticipated problems with the third-party services that we use, including a failure to meet service standards. As a highly automated business with a significant amount of our customers, suppliers and employees working remotely, any such disruptions or failures could (i) result in the destruction or disruption of our critical business operations, controls or procedures or IT systems, (ii) severely affect our ability to conduct normal business operations, including delaying completion of sales and provision of services, (iii) result in a material weakness in our internal control over financial reporting, (iv) harm our reputation and (v) adversely affect our ability to attract and retain customers, any of which could materially adversely affect our future operating results.

Besi believes that there has been a global increase in IT security threats and higher levels of professionalism in computer crime which pose a greater risk to the confidentiality, availability, distribution and integrity of our internal data and information. Besi relies on commercially available systems, software, tools and monitoring to provide security for the processing, transmission and storage of confidential information. A disruption, infiltration or failure of our IT systems or any of our data centers could occur as a result of technological error, computer viruses, or third-party action including intentional misconduct by computer hackers, physical break-ins, the actions of state actors, industrial espionage, ransomware efforts, fraudulent inducement of employees or customers to disclose sensitive information such as usernames or passwords, and employee or customer error or malfeasance.

A security breach could result in unauthorized access to or disclosure, modification, misuse, loss, or destruction of our or our customer's data (including proprietary design information, intellectual property or trade secrets). Because there are many different security breach techniques and such techniques continue to evolve, we may be unable to anticipate attempted security breaches and implement adequate preventative measures. Any security breach or successful denial of service attack could result in a loss of customer confidence in the security of our products and damage to our brand, reduce the demand for our offerings, disrupt our normal business operations, compromise our competitive technological position, require us to spend material resources to investigate or correct the breach, expose us to legal liabilities including litigation, regulatory enforcement and indemnity obligations and materially adversely affect our operating results.

Our business may be harmed if we fail to attract and retain qualified personnel.

Besi's future success depends in significant part on the continued contribution of its senior executive officers and key employees including a number of specialists with advanced university qualifications in the fields of engineering, electronics, software and computing. In addition, we need to attract and retain other qualified management, technical, sales and support personnel for our operations, particularly to help expand Asian production and technical capabilities.

Besi's business and future operating results also depend on the continuous monitoring and adjustment of our Asian production capacity given the cyclical nature of our business and increased seasonal influences on order rates. We believe that our ability to increase manufacturing capacity has from time to time been constrained by the limited number of skilled technical and production personnel available. Competition for such personnel is intense and may be amplified by evolving and periodic restrictions on immigration, travel or availability of visas for skilled technology workers. In addition, labor costs in the various countries in which we operate are rising. The loss of any key executive or employee or the inability to attract and retain skilled executives and employees as needed could adversely affect our business, financial condition and results of operations.

Any significant disruption to Besi's operations could reduce the attractiveness of our products and result in a loss of customers.

The timely delivery and satisfactory performance of Besi's products are critical to our operations, reputation and ability to attract new customers and to retain existing customers. Besi's administrative, development and systems manufacturing are located all over the world including locations in the Netherlands, Malaysia, Singapore, Austria, China, Vietnam and Switzerland. Some of Besi's facilities are in locations that have experienced severe weather conditions, fire, natural disasters, flooding, political unrest and/or terrorist incidents. For example, the operations of Besi's die bonding facility located near Kuala

Lumpur, Malaysia were disrupted by a severe flood in the fourth quarter of 2021 which caused us to defer shipments by four to eight weeks with a revenue value of approximately € 20-25 million and to incur € 7.4 million of costs to repair systems affected by the flood.

If the operations at any of our facilities in the future were damaged or destroyed as a result of any of the foregoing, or as a result of other factors, Besi could experience interruptions in its service, delays in product deliveries and would likely incur additional costs to arrange new production facilities which may not be available on timely or commercially reasonable terms, or at all. Any interruptions to Besi's operations or delays in delivering its products could harm our customer relationships and brand reputation, divert employees' attention, decrease revenue, increase our liability exposure and could potentially cause order cancellations, any of which could adversely affect Besi's business, financial condition and results of operations. It is unclear whether Besi's insurance policies would adequately compensate for any losses incurred as the result of a production or service disruption or delay.

Besi is largely dependent upon its international operations.

Besi has manufacturing and/or sales and service facilities and personnel in the Netherlands, Austria, Malaysia, Korea, Hong Kong, Singapore, China, the Philippines, Taiwan, Thailand, Switzerland, Vietnam and North America. Its products are marketed, sold and serviced worldwide. In addition, 84% of its sales in 2023 were to customers outside of Europe and 68% of its employees at year end 2023 were located in facilities outside of Europe.

Besi's operations are subject to risks inherent in international business activities including, in particular:

- General economic, banking and political conditions in each country.
- Unexpected changes in regulatory requirements, compliance with a variety of foreign laws and regulations including restrictions on immigration, travel, or availability of visas.
- The overlap of different tax structures and potentially conflicting interpretations of tax regulations.
- Management of an organization spread over various countries.
- Currency fluctuations which could result in reduced revenue, increased operating expenses and foreign currency controls.
- Greater difficulty in accounts receivable collection and longer collection periods.
- Difficulty in enforcing or adequately protecting Besi's intellectual property in foreign jurisdictions.
- Less developed and predictable legal systems.
- Tariffs, import and export licensing requirements, trade restrictions, restrictions on foreign investments and changes in freight rates.
- Political unrest and terrorist activities in the countries in which it operates.
- Ethical issues such as corruption, bribery and human rights violations.
- Varying impacts per region from climate change events.

In addition, each region in the global semiconductor equipment market exhibits unique characteristics that can cause capital equipment investment patterns to vary significantly from period to period.

Geographically focused disruptions or failures, such as natural disasters, acts of terrorism, geopolitical conflict or other localized catastrophic events as well as power outages or telecommunications infrastructure outages in our Asian operations could have a material adverse effect on our business and results of operations.

In addition, compliance with foreign laws and regulations that are applicable to our international operations is complex and may increase our cost of doing business in international jurisdictions. Further, our international operations could expose us to fines and penalties if we fail to comply with regulations such as anti-bribery laws and local laws prohibiting corrupt payments to governmental officials. Although we have implemented policies and procedures designed to help ensure compliance with such laws, there can be no assurance that our employees, partners and other persons with whom we do business will not take actions in violation of our policies or these laws. Any violations could subject us to civil or criminal penalties including substantial fines or prohibitions on our ability to offer our products and services to one or more countries and could also materially damage Besi's reputation and brand identity.

Recent regulations and increased customer focus on the usage of conflict minerals in product supply chains may force us to incur additional expenses, make our supply chain more complex and result in damage to Besi's customer reputation.

US, European and Chinese regulatory authorities have established initiatives with respect to the usage by corporations of certain minerals and metals known as conflict minerals in their products, regardless of whether such products are manufactured by third parties. Regulations require companies to conduct due diligence and disclose whether the subject minerals originated from the Democratic Republic of Congo ("DRC") and/or certain adjoining countries. The implementation of such regulations could adversely affect the sourcing, availability and pricing of minerals used in the manufacture and assembly of semiconductor devices. Besi's reputation could also be harmed since our supply chain is complex and verification of the origins of these materials in our products through due diligence procedures may be difficult and costly and may not be possible at all. In such an event, we may also face difficulties in satisfying customers who require that all our product components be certified as conflict-free. Please refer to Besi's Conflicts Mineral and Supply Chain Policy in the ESG section of this Annual Report.

Asian production and personnel expansion could expose us to additional risks related to corruption and human rights issues in the region.
In recent years, we have significantly increased our production, engineering and supply chain capabilities in Asia (Malaysia, China and Singapore) to increase our local presence and operational efficiency. Asian personnel represented 66% of our total headcount at year end 2023. Further, revenue from Asian customers represented approximately 73% of consolidated revenue in 2023. As a more active Asian participant, we may be confronted with incidents of corruption and human rights violations which are significant issues in the region. In addition, expanded Asian operations could expose us to the risk of fraud or bribery in our supply chain activities.

Financial risks

Besi's historical financial results have fluctuated significantly and may continue to do so in the future.
Besi's quarterly revenue, orders and operating results have fluctuated significantly in the past and may continue to do so in the future. Besi believes that period to period comparisons of its operating results are not necessarily indicative of future operating results. Factors that have caused our operating results to fluctuate in the past and which are likely to affect them in the future include the following, many of which are beyond our control:

- Global macroeconomic trends and geopolitical events, which may influence levels of gross domestic product, purchasing power and consumer confidence of various regions including both developed and lesser developed countries and which may affect customer willingness to invest in new production capacity.
- The number and frequency of new electronics introductions, particularly for retail applications such as mobile, computing, gaming, infotainment and automotive end-user markets.
- The volatility and seasonality of the semiconductor industry and its impact on semiconductor equipment suppliers.
- Industry capacity utilization, pricing and inventory levels.
- The timing of new customer device introductions and production processes which could require the addition of new assembly equipment capacity.
- The success of Besi's research and development activities including new hybrid bonding and other wafer level assembly systems and volume production related thereto.
- The length of sales cycles and lead times associated with Besi's product offerings.
- The timing, size and nature of Besi's transactions.
- The financial health and business prospects of Besi's customers.
- The impact on potential orders from consolidation trends among semiconductor producers.
- The proportion of semiconductor demand represented by industrial and retail applications.
- Our ability to scale operations on a timely basis consistent with product demand.
- The ability of Besi's suppliers to meet our demand for components, subassemblies and modules on a timely basis.
- The market acceptance of new products or product enhancements by Besi or its competitors.
- The timing of new personnel hires and the rate at which new personnel become productive.
- Changes in pricing policies by Besi's competitors.
- Changes in Besi's operating expenses.
- Besi's ability to adequately protect its intellectual property.
- Besi's ability to integrate any future acquisitions and any restructuring charges related thereto.
- The fluctuation of foreign currency exchange rates.
- The impact of any future pandemic on our customers, suppliers and employees.

Because of such factors, investors should not rely on quarter to quarter comparisons of Besi's results of operations as an indication of future performance. In future periods, Besi's results of operations could differ from estimates of public market analysts and investors. Such discrepancies could cause the market price of its securities to decline.

Besi's orders at any particular date may not be indicative of future operating results.
Besi's orders aggregated € 548.3 million in 2023 which reflected a 17.4% decrease versus 2022 primarily due to a significant assembly equipment downturn which commenced in the second quarter of 2022 and continued throughout 2023. Orders are subject to customer cancellation at any time upon payment of a negotiated cancellation fee. During market downturns, semiconductor manufacturers historically have cancelled or deferred additional equipment purchases. Besi's bookings may also be influenced by seasonal factors which typically cause order levels to decline in the second half of the year from peak levels reached in the first half year. Orders can also be affected by customer cancellations. For example, orders declined by 58% in the second quarter of 2018 versus the first quarter of 2018 primarily due to the cancellation by a single customer of € 28 million in orders.

Because of the possibility of changes in delivery schedules, expedited cycle times, cancellations and delays in product shipments, Besi's orders at any particular date may not be representative of actual revenue for any succeeding period. Besi's current and future dependence on a limited number of customers increases the potential revenue impact of any delay or deferral activity by customers.

Besi may not be able to adjust its costs and overhead levels quickly enough to offset revenue declines that it may experience in the future.

A portion of Besi's business is characterized by relatively fixed costs including personnel, facility and general and administrative as well as expenses related to the maintenance of our manufacturing equipment. Expense levels in future periods will be based, in large part, on expectations regarding future revenue sources. As a result, our operating results for any given period in which material orders fail to occur, are delayed or are deferred could vary significantly. Due to the nature of such fixed costs, we may not be able to reduce our fixed costs sufficiently or in a timely manner to offset any future revenue declines. Our inability to align revenue and expenses in a timely and sufficient manner would have an adverse impact on Besi's gross margins and results of operations.

A limited number of customers have accounted for a significant percentage of Besi's revenue, and its future revenue could decline if it cannot maintain or replace these customer relationships.

Historically, a limited number of Besi's customers have accounted for a significant percentage of its revenue. In 2023, no customer represented more than 10% of Besi's revenue and its largest ten customers accounted for 52% of revenue. We anticipate that our results of operations in any given period will continue to depend to a significant extent upon revenue from a relatively limited number of customers. In addition, we anticipate that the composition of such customers will continue to vary from year to year so that the achievement of our long-term goals will require the maintenance of relationships with existing customers and obtaining additional customers on an ongoing basis. Besi's failure to enter into and realize revenue from a sufficient number of customers during a particular period could have a significant adverse effect on our revenue development.

In addition, there are a limited number of customers worldwide interested in purchasing semiconductor manufacturing equipment and an even more limited number of major customers and supply chains for specific end market applications such as smartphones, tablets, wearables, laptops, computers and automotive electronics. As a result, if only a few potential customers were to experience financial difficulties or file for bankruptcy protection or if there were further customer or supply chain consolidation, the semiconductor equipment manufacturing market as a whole, and Besi's revenue and results of operations specifically, could be negatively affected.

Besi's results of operations have in the past and could in the future be affected by currency exchange rate fluctuations.

The following tables set forth Besi's revenue and costs and expenses by principal functional currency for 2023, 2022 and 2021:

			Revenue
	2023	**2022**	**2021**
Euro	75%	28%	22%
US dollar	25%	72%	78%
Total	**100%**	**100%**	**100%**

			Costs and Expenses
	2023	**2022**	**2021**
Euro	32%	27%	27%
Malaysian ringgit	23%	30%	31%
Chinese renminbi	15%	14%	13%
Singapore dollar	10%	8%	7%
US dollar	8%	10%	11%
Swiss franc	8%	8%	8%
Other	4%	3%	3%
Total	**100%**	**100%**	**100%**

Besi's principal reporting currency is the euro. Due to its global operations and differences in the foreign currency composition of its revenue and costs and expenses, Besi's results of operations could be adversely affected by fluctuations in the values of, and the relationships between, the euro, the US dollar, Swiss franc, Malaysian ringgit, Chinese renminbi and Singapore dollar. We seek to manage our exposure to currency fluctuations in part by hedging firmly committed sales contracts denominated in US dollars. While management will continue to monitor its exposure to currency fluctuations and may use financial hedging instruments to minimize the effect of such fluctuations, Besi cannot assure that exchange rate fluctuations will not have a material adverse effect on its results of operations or financial condition.

Besi's principal competitors are domiciled in countries utilizing primarily US dollar and/or Japanese yen as their principal currencies for the conduct of their operations. Besi believes that a decrease in the value of the US dollar and US dollar linked currencies or Japanese yen in relation to the euro could lead to intensified price-based competition in its markets resulting in lower prices and margins and could have a negative impact on our business and results of operations.

We may not declare dividends at all or in any particular amount in any given year.
Besi aims to pay an annual dividend in accordance with its dividend policy and seeks to increase the amount over time. On an annual basis, the Board of Management (with Supervisory Board approval) will submit a proposal for approval at the Annual General Meeting of Shareholders with respect to the dividend amount to be declared for the prior financial year. The proposal in any given year will be subject to (i) Besi's review of (a) its annual and prospective financial performance, liquidity and financing needs, (b) the prevailing market outlook, (c) its strategy, market position and acquisition strategy and/or (ii) a target dividend payout ratio in the range of 40-100% relative to net income to be adjusted accordingly if the factors referred to under (i) so require.

Accordingly, the Board of Management may decide not to pay a dividend, or a lower dividend, with respect to any particular year in the future which could have a material adverse effect on the price of Besi's ordinary shares.

Legal and compliance risks

Besi may not be able to protect its intellectual property rights which could make it less competitive and cause it to lose market share.
Although Besi seeks to protect its intellectual property rights through patents, trademarks, copyrights, trade secrets, confidentiality and assignment of invention agreements and other measures, there can be no assurance that we will be able to protect our technology adequately, that our competitors will not be able to develop similar technology independently, that any of Besi's pending patent applications will be issued or that intellectual property laws will protect our intellectual property rights. In addition, Besi operates internationally and intellectual property protection varies among the jurisdictions in which we conduct our business operations. In certain jurisdictions, the prevention of theft or copying can be challenging. Litigation may be necessary to enforce our patents, copyrights or other intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others or to defend against claims of infringement. Litigation could result in substantial costs and a diversion of resources, distract Besi's management from operating the business and could have a material adverse effect on our business and operating results.

In addition, third parties may seek to challenge, invalidate or circumvent any patent issued to Besi. Further, the rights granted under any patent issued to Besi may not provide competitive advantages and third parties may assert that our products infringe patents, copyrights or trade secrets of such parties. Also, third parties may challenge, invalidate or circumvent technology which Besi licenses from third parties. If any party is able to successfully claim that Besi's creation or use of proprietary technology infringes upon their intellectual property rights, we may be forced to pay damages. In addition to any damages we may have to pay, a court could require us to stop the infringing activity or obtain a license which may not be available on terms which are favorable to Besi or at all.

Besi is subject to environmental rules and regulations in a variety of jurisdictions.
We are subject to a variety of governmental regulations related to the use, storage, discharge and disposal of chemical by-products and water used in our manufacturing processes. The failure to comply with any present or future regulations and/or environmental claims related thereto could result in the assessment of damages or imposition of fines against Besi, the suspension of production or the cessation of operations. New regulations could require us to acquire costly equipment or to incur other significant expenses to remediate environmental issues. In addition, any failure by us to control the use or adequately restrict the discharge of hazardous substances into the environment could subject Besi to future liabilities.

Our business, reputation and financial position may be harmed by unethical behavior and non-compliance with Besi's Code of Conduct.
Besi seeks to conduct its business in accordance with internationally recognized standards and best practices. We have adopted social, ethical and environmental standards for our operations that typically exceed minimum legal and regulatory compliance levels and applied European social and ethical standards in the conduct of our operations wherever possible. Besi has established a Code of Conduct which governs the behavior of our employees worldwide on matters such as corruption and human rights behavior as well as integrity and ethical behavior, all of which are important values to the Company.

However, we might still encounter unethical behavior and breaches to our Code of Conduct due to intentional fraudulent behavior by individual employees. Issues can arise unintentionally or from a lack of adherence to appropriate rules and regulations. Unethical behavior and misconduct could lead to fines, penalties and claims by injured parties as well as material financial loss and damage to the reputation of Besi and its stakeholders.

Moreover, environmental, social and governance matters continue to evolve rapidly. To the extent such matters have the effect of negatively impacting our reputation, they may also impede our ability to compete as effectively or to recruit and/or retain employees, which may adversely affect our operations.

Anti-takeover provisions could delay or prevent a change of control including a takeover attempt that might result in a premium over the market price for Besi's ordinary shares.

Besi's articles of association provide for the possible issuance of preference shares. In April 2000, Besi established the foundation "Stichting Continuïteit BE Semiconductor Industries" (the "Foundation") whose board consists of five members, three of whom are independent of Besi. Besi has granted the Foundation a call option pursuant to which the Foundation may purchase preference shares in a maximum amount equal to the total number of Besi's ordinary shares outstanding at the time of exercise of the option minus one. If the Foundation were to exercise the call option, it may result in delaying or preventing a takeover attempt including a takeover attempt that might result in a premium over the market price for Besi's ordinary shares.

Shareholder Information

Shareholder Information

Euronext Amsterdam listing

Besi's ordinary shares are listed on Euronext Amsterdam and are included in the Euronext AEX index. The stock symbol is BESI and the ISIN code is NL0012866412.

	At December 31, 2023	2022
Number of ordinary shares, net of shares held in treasury	77,015,794	78,487,926
Average daily shares traded*	958,008	1,170,670
Highest closing price (€)	140.85	88.28
Lowest closing price (€)	57.32	41.38
Year end share price (€)	136.45	56.56

* Includes Euronext and all secondary markets.

OTC Markets

Besi's Level 1 ADRs are traded on the OTC markets (symbol: BESIY).

Convertible Notes listings

At December 31, 2023, Besi had outstanding (i) € 3.2 million of its 0.5% Senior Unsecured Convertible Notes due 2024 (the "2017 Convertible Notes") ISIN XS1731596257, (ii) € 150 million of its 0.75% Senior Unsecured Convertible Notes due 2027 (the "2020 Convertible Notes") ISIN XS2211511949 and (iii) € 175 million of its 1.875% Senior Unsecured Convertible Notes due 2029 (the "2022 Convertible Notes") ISIN XS2465773070, all of which are listed on Deutsche Börse's Freiverkehr market **www.boerse-frankfurt.de**.

Besi's equity structure

Besi's authorized share capital consists of 160,000,000 ordinary shares and 160,000,000 preference shares. At December 31, 2023, Besi had 81,146,738 issued and outstanding ordinary shares of which Besi held 4,130,944 shares in treasury.

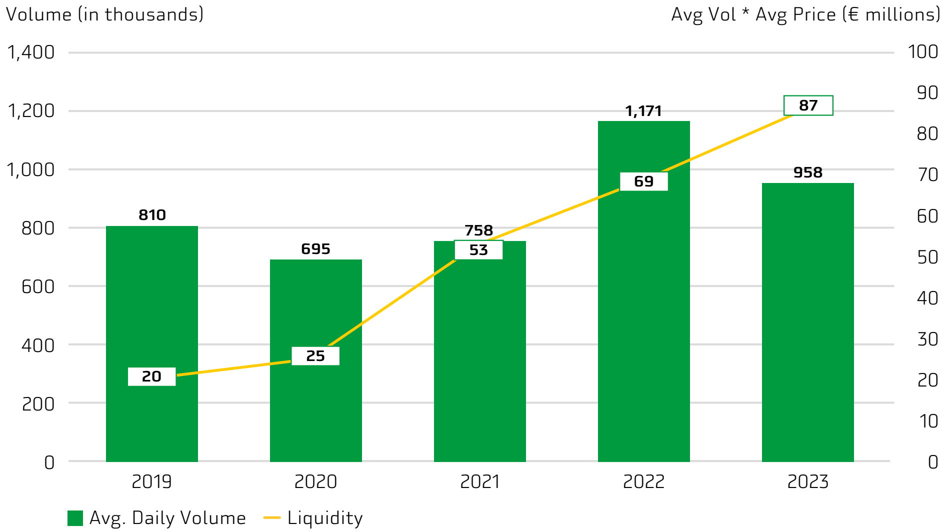
The foundation "Stichting Continuïteit BE Semiconductor Industries" (the "Foundation") has been granted an option to acquire preference shares, which would, if the option were exercised, allow the Foundation to acquire a maximum of 50% of the total issued share capital including the preference shares.

BESI MARKET INFORMATION

Symbol/Index	• BESI • Euronext AEX
Market Cap*	• € 10.5 billion ($ 11.6 billion)
Dividend Policy	• Pay-out 40-100% of net income per annum

* As of December 31, 2023.

AVERAGE DAILY VOLUME AND LIQUIDITY



Issuance of ordinary shares and pre-emptive rights

Ordinary shares may be issued pursuant to a resolution of the General Meeting of Shareholders. The General Meeting of Shareholders may grant the authority to issue ordinary shares to the Board of Management for a maximum period of five years. After such designation, the Board of Management may determine the issuance of ordinary shares subject to the approval of the Supervisory Board. The foregoing applies accordingly to the granting of rights to subscribe for ordinary shares but shall not be applicable to the issuance of ordinary shares to a party exercising a previously acquired right to subscribe for ordinary shares.

Currently, the General Meeting of Shareholders has delegated its authority to the Board of Management until October 26, 2024, subject to the approval of the Supervisory Board, to issue ordinary shares and grant rights to subscribe for ordinary shares up to a maximum of 10% of Besi's issued share capital as from April 26, 2023.

Holders of ordinary shares have a pro-rata, pre-emptive right in relation to any ordinary shares issued, which right may be limited or excluded. Such shareholders have no pro-rata pre-emptive right with respect to (i) any ordinary shares issued against contributions other than in cash, (ii) any issuance of preference shares, or (iii) any ordinary shares issued to employees (including members of the Board of Management). The foregoing applies accordingly to the granting of rights to subscribe for ordinary shares but shall not be applicable to the issuance of ordinary shares to a party exercising a previously acquired right to subscribe for ordinary shares. On the basis of a designation by the General Meeting of Shareholders, the Board of Management has the power, subject to the approval of the Supervisory Board, to limit or exclude the pre-emptive right in relation to any ordinary shares issued and rights to subscribe for ordinary shares granted until October 26, 2024, subject to the 10% maximum as described above. The designation may be renewed for a maximum period of five years. In the absence of such designation, the General Meeting of Shareholders has the power to limit or exclude such pre-emptive right.

Issuance of preference shares

The provisions in Besi's articles of association for the issuance of preference shares are similar to the provisions for the issuance of ordinary shares described herein. However, an issuance of preference shares will require the prior approval of the General Meeting of Shareholders if it would result in an outstanding number of preference shares exceeding 100% of the number of outstanding ordinary shares and the issuance is effected pursuant to a resolution of a corporate body other than the General Meeting of Shareholders, such as the Board of Management. Furthermore, within two years after the first issuance of such preference shares, a General Meeting of Shareholders will be held to determine the repurchase or cancellation of the preference shares. If no resolution to repurchase or cancel the preference shares is adopted, another General Meeting of Shareholders with the same agenda must be convened and held within two years after the previous meeting and this meeting will be repeated until no more preference shares are outstanding. This procedure does not apply to preference shares that have been issued pursuant to a resolution by the General Meeting of Shareholders. In connection with the issuance of preference shares, it may be stipulated that an amount not exceeding 75% of the nominal amount ordinarily payable upon issuance of shares may be paid only if the Company requests payment.

The Foundation

Under the terms of an agreement entered in April 2002 between the Company and the Foundation, the Foundation has been granted a call option, pursuant to which it may purchase a number of preference shares up to a maximum of the total number of outstanding ordinary shares at the time of exercise of the option minus one. This call option agreement was revised in May 2008 to comply with applicable laws. The purpose of the Foundation is to safeguard the interests of the Company, the enterprise connected therewith and all the parties having an interest therein and to exclude as much as possible influences which could threaten, among other things, the Company's continuity, independence and identity. Until the call option is exercised by the Foundation, it can be revoked by the Company, with immediate effect. The aim of the preference shares is, amongst other things, to provide a protective measure against unfriendly take-over bids and other possible influences that could threaten the Company's continuity, independence and identity, including, but not limited to, a proposed resolution to dismiss the Supervisory Board or the Board of Management.

The Foundation was established in April 2000. The board of the Foundation currently consists of five members, three of whom are independent of Besi and two of whom are former members of the Supervisory Board. Please refer to the chapter Other Information for additional information about the Foundation and its board members.

Voting rights

Each share (whether it is an ordinary share or a preference share) carries the right to cast one vote. Resolutions by the General Meeting of Shareholders require the approval of an absolute majority of votes validly cast, unless otherwise required by Dutch law or Besi's articles of association.

Repurchase and cancellation of shares

The Board of Management may cause the Company to repurchase for consideration any class of shares in its own share capital which have been paid-up, subject to certain provisions of Dutch law and Besi's articles of association, if (i) the shareholders' equity less the payment required to make the acquisition does not fall below the sum of the paid-up and called part of the issued share capital and any reserves required to be maintained by Dutch law or Besi's articles of association and (ii) the Company and its subsidiaries would thereafter not hold shares (in pledge) with an aggregate nominal value exceeding 50% of the Company's issued share capital. Shares held by the Company or any of its subsidiaries will have no voting rights and the Company may not receive dividends on shares it holds in its own share capital. Any such repurchases may only take place if the General Meeting of Shareholders has granted the Board of Management the authority to effect such repurchases, which authorization may apply for a maximum period of 18 months. The Board of Management, with the approval of the Supervisory Board, is currently authorized to repurchase up to 10% of Besi's issued share capital from April 26, 2023 through October 26, 2024.

Upon a proposal of the Board of Management, with the approval of the Supervisory Board, the General Meeting of Shareholders has the power to reduce the Company's issued share capital by means of cancelling shares held in treasury or by reducing the nominal value of the shares by way of an amendment of the Company's articles of association. Any such proposal is subject to the relevant provisions of Dutch law and Besi's articles of association. Upon the proposal of the Board of Management, with the approval of the Supervisory Board, the General Meeting of Shareholders agreed to authorize the cancellation of ordinary shares held in treasury of up to a maximum of 10% of the Company's issued share capital as at April 26, 2023. In accordance therewith, the Board of Management was authorized to determine the exact number of ordinary shares to be so cancelled.

Change of control provisions in significant agreements

Each of Besi's 2017, 2020 and 2022 Convertible Notes contain change of control provisions under which in the event of a change of control of Besi (as defined), the holder of a Convertible Note will have the right to require Besi to redeem that Convertible Note at 100% of its principal amount together with accrued and unpaid interest thereon. In addition, Besi's revolving credit facility with a consortium of banks contains a provision requiring the repayment of all borrowings outstanding upon a change of control of Besi (as defined) at 100% of its principal amount outstanding. At December 31, 2023, there was no change of control provision contained in any other of Besi's material agreements.

Dividend policy

Besi considers the payment of dividends on an annual basis based upon (i) a review of its annual and prospective financial performance, liquidity and financing needs, the prevailing market outlook and Besi's strategy, market position and acquisition strategy and/or (ii) a dividend payout ratio in the range of 40-100% relative to net income to be adjusted if the factors referred to under (i) so require.

Due to Besi's earnings and cash flow generation in 2022, the Board of Management, with the approval of the Supervisory Board, proposed and Besi paid a cash dividend to shareholders equal to € 2.85 per share for 2022 which resulted in cash payments to shareholders of € 222.1 million. Due to Besi's earnings and cash flow generation in 2023, the Board of Management will, with the approval of the Supervisory Board, propose a cash dividend to shareholders equal to € 2.15 per share for 2023 for approval at Besi's Annual General Meeting of Shareholders to be held on April 25, 2024. The payments for the year 2022 and proposed for the year 2023 represent a dividend payout ratio relative to net income of 92% and 94%, respectively.

Ownership interests in the ordinary shares

Under the Dutch Financial Supervision Act (*Wet op het financieel toezicht,* "Wft"), the following parties have notified the Dutch Authority for the Financial Markets (*Autoriteit Financiële Markten,* "AFM") of their share interests in the Company equal to or exceeding 3%:

	Notification effective	Share interest	Voting rights
BlackRock Inc.	February 14, 2024	10.11%	11.57%
FMR LLC	May 11, 2023	6.00%	6.00%
Goldman Sachs Group Inc.	December 6, 2023	4.28%	4.28%
BE Semiconductor Industries N.V.	October 19, 2023	5.00%	0.00%
Norges Bank	August 24, 2023	3.29%	3.29%
T. Rowe Price Group, Inc.	September 13, 2023	3.21%	3.08%
Société Générale S.A.	February 22, 2023	3.05%	3.05%
Sylebra Capital Limited	October 18, 2021	3.04%	3.04%

A list of share and voting interests in the Company of 3% or more can be found on the AFM website: **www.afm.nl**.

Analysts

The following sell side analysts cover Besi's shares:

Alliance Bernstein	Sara Russo
Arete Research	Jim Fontanelli
Barclays	Simon Coles
Berenberg	Trion Reid
B of A Securities	Didier Scemama
BNP Paribas Exane	Martin Jungfleisch
Citi	Andrew Gardiner
Degroof Petercam	Michael Roeg
Deutsche Bank	Rob Sanders
Goldman Sachs	Alexander Duval
ING	Marc Hesselink
KBC Securities	Thibault Leneeuw
Kepler Chevreux	Ruben Devos
Morgan Stanley	Nigel van Putten
Needham & Company	Charles Shi
NewStreet Research	Rolf Bulk
ODDO BHF/ABN AMRO	Martin Marandon-Carlhian
Redburn Atlantic	Timm Schulze-Melander
Stifel	Florian Sager
UBS	Madeleine Jenkins
Van Lanschot Kempen	Nikos Kolokotronis

Investor relations

Besi uses a range of activities to initiate and maintain contact with investors. After publication of its annual and quarterly results, (virtual) roadshows are typically held for institutional investors in Europe, the United States and Asia. Planned roadshows and presentations can be found on the Besi website. Contacts with institutional investors are further maintained by means of conference calls, conferences and investor visits. The Company's investor outreach also includes meetings with retail investors, research analysts, private investors, journalists and media outlets to help communicate the Besi story to the investment community and general public. Shareholders are also engaged through quarterly and annual conference calls and participation at Besi's Annual General Meeting of Shareholders.

Investors in European, North American and Asian markets are increasingly considering sustainability and Environmental, Social and Governance ("ESG") themes as part of their investment process. Investors are requesting more ESG information from us than in previous years particularly in the areas of climate change, fossil fuels, carbon emissions, conflict minerals and human rights within the supply chain. Shareholders expect Besi to protect their investment and provide a competitive return on invested capital while operating in a sustainable and responsible manner as a good corporate citizen. Besi has engaged in important dialogue with stakeholders and received valuable feedback about its business and ESG issues as a result of its investor relations program.

Important investor relations dates in 2024 that are currently planned (subject to change) are as follows:

April 25, 2024	2024 first quarter results
April 25, 2024	Annual General Meeting of Shareholders
July 25, 2024	2024 second quarter results
October 24, 2024	2024 third quarter results
February 2025	2024 fourth quarter and annual results

Prevention insider trading

Besi has implemented a Code of Conduct governing the use of inside information by the members of the Supervisory Board, the member of the Board of Management and any other designated persons, including key staff members. In addition, there is a separate Code of Conduct governing the use of inside information by Besi employees generally. Designated persons have agreed in writing to observe the relevant Code of Conduct concerning the reporting and regulation of transactions in Besi securities (and other designated securities) and the treatment of price-sensitive information. Besi has appointed a compliance officer who is responsible for monitoring compliance with the Codes of Conduct and communication with the AFM.

Besi Incentive Plan

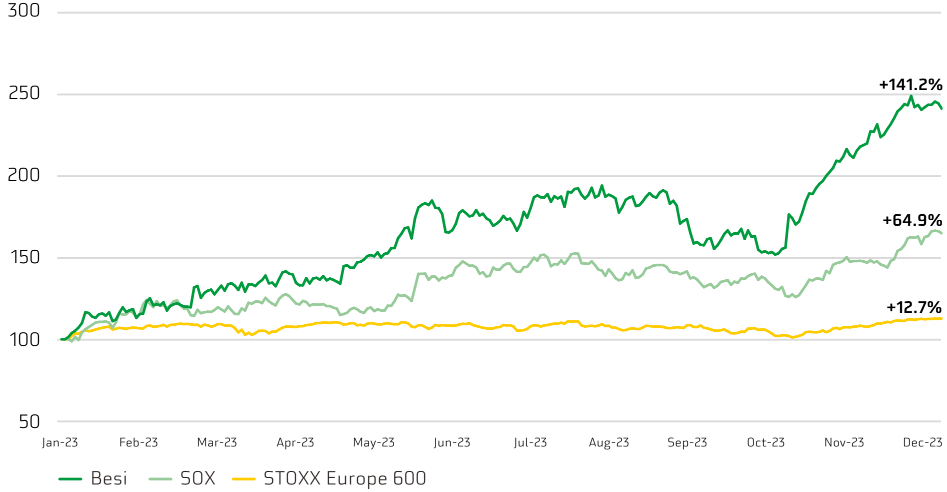
Besi may grant performance shares on an annual conditional basis to the member of the Board of Management, key employees and officers under the current Besi Incentive Plan. Further information on this subject is given in the Remuneration Report.

Besi's share price development

BESI'S SHARE PRICE VERSUS SOX INDEX AND STOXX EUROPE 600 INDEX
(Since January 1, 2021 until December 31, 2023; rebased to 100)

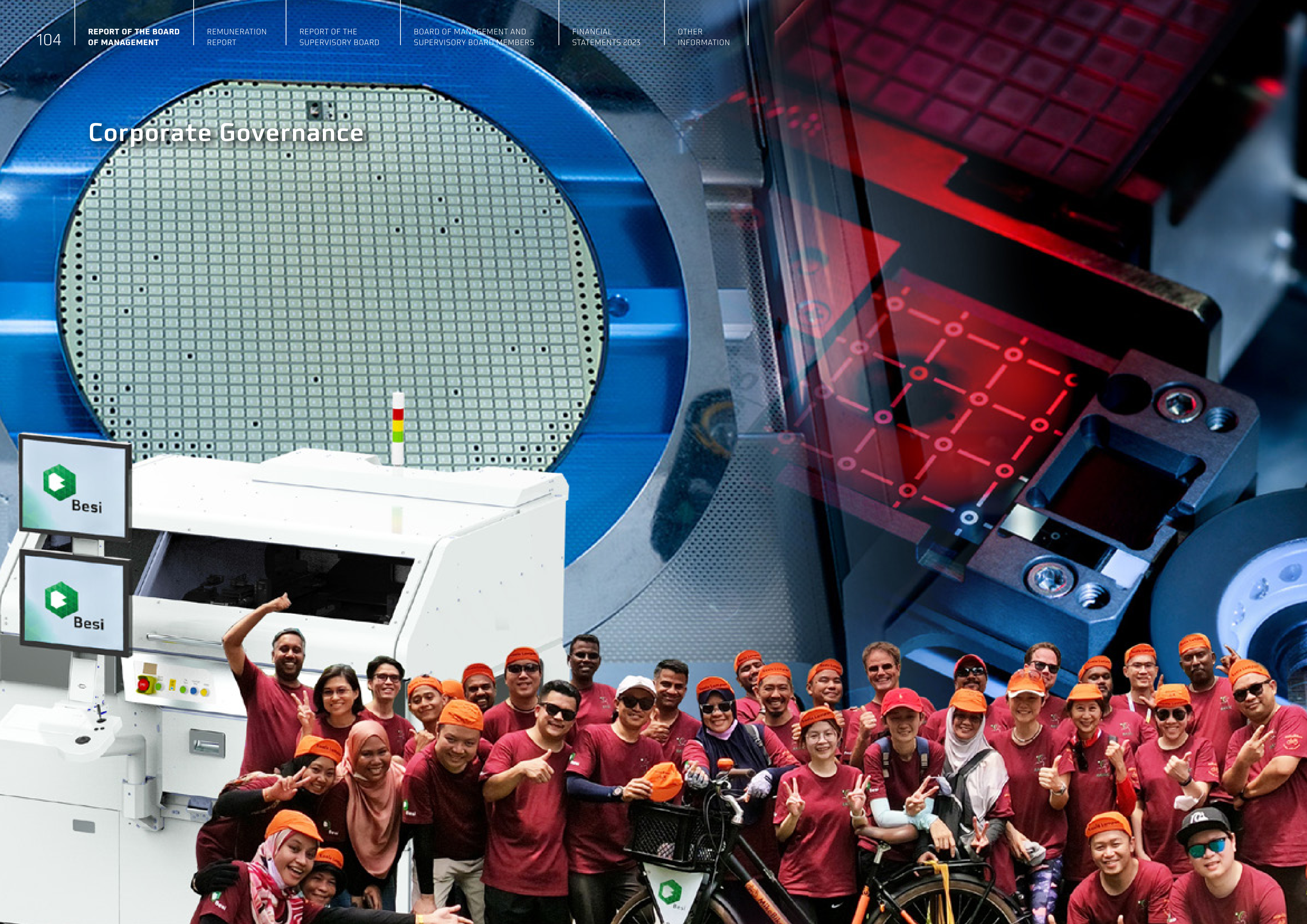
Source: Capital iQ

BESI'S SHARE PRICE VERSUS SOX INDEX AND STOXX EUROPE 600 INDEX
(Since January 1, 2023 until December 31, 2023; rebased to 100)



Source: Capital iQ

Corporate Governance



Corporate Governance

Besi acknowledges the importance of good corporate governance, the most important elements of which are transparency, independence and accountability. Important corporate governance developments in applicable jurisdictions are followed closely and rules are implemented where appropriate.

Besi's ordinary shares are listed on Euronext Amsterdam. Accordingly, Besi complies with all applicable listing rules of Euronext Amsterdam.

Besi applied the Dutch Corporate Governance Code which was updated in 2022. Deviations from the Dutch Corporate Governance Code are explained below under Explanation of Deviations from the Dutch Corporate Governance Code. The Dutch Corporate Governance Code can be found at **www.mccg.nl**.

Board of Management

The role of the Board of Management is to manage the Company and its affiliated enterprises and to ensure their continuity, which includes, among other things:
- The formulation of a sustainable long-term value creation strategy.
- The identification, analysis and management of the risks inherent in Besi's business and sustainable long-term value creation strategy and initiatives related thereto.
- The establishment of Besi's risk appetite and implementation of measures necessary to mitigate any risks undertaken.
- The proper regard for environmental, social and governmental issues relevant to Besi and the global communities in which we operate as further described in our Environmental, Social and Governance Report.
- The proper regard for the impact of new technologies on our society, products, employees, stakeholders and business model in such areas as digitalization, artificial intelligence, and automation, amongst others.

In discharging their role, members of the Board of Management shall be guided by the interests of the Company and its affiliated enterprises as well as the interests of Besi's shareholders and other stakeholders. Members of the Board of Management are required to put the interests of the Company ahead of their own interests and to act critically and independently when carrying out their responsibilities. The Board of Management is also charged with establishing and maintaining internal procedures which ensure that all relevant information is provided to the Supervisory Board in a timely manner.

The Company's articles of association provide that certain resolutions of the Board of Management require the prior approval of the Supervisory Board. Pursuant to Dutch law and the Company's articles of association, any decisions of the Board of Management involving a major change in the identity or character of the Company and/or its affiliated enterprises are subject to approval by the General Meeting of Shareholders.

Appointment and replacement of members of the Board of Management

Members of the Board of Management are appointed by the General Meeting of Shareholders. A resolution of the General Meeting of Shareholders to appoint a member of the Board of Management requires an absolute majority of the votes validly cast in the event and to the extent the appointment occurs pursuant to, and in accordance with, a proposal of the Supervisory Board. Such resolution requires at least two thirds of the votes validly cast representing more than one third of the issued share capital in the event and to the extent the appointment does not occur pursuant to, and in accordance with, a proposal thereto of the Supervisory Board.

Members of the Board of Management may at any time be suspended or dismissed by the General Meeting of Shareholders. A resolution for suspension or dismissal of a member of the Board of Management requires an absolute majority of the votes validly cast in the event and to the extent the suspension or dismissal occurs pursuant to, and in accordance with, a proposal by the Supervisory Board. Such resolution requires at least two thirds of the votes validly cast representing more than one third of the issued share capital in the event and to the extent the suspension or dismissal does not occur pursuant to, and in accordance with, a proposal thereto of the Supervisory Board. Members of the Board of Management may also be suspended by the Supervisory Board.

Remuneration Report

The Remuneration Report is included in a separate section in this Annual Report.

Conflicts of interest – members of the Board of Management

Any appearance of a conflict of interest between the Company and members of the Board of Management should be prevented. If a member of the Board of Management has an actual or potential direct or indirect personal conflict of interest with the Company, he or she shall not participate in the deliberations and the decision-making process of the Board of Management for such matter. If, as a result thereof, no resolution of the Board of Management can be adopted, the resolution may be adopted by the Supervisory Board. No conflict of interest of material significance to Besi and/or the member of the Board of Management was reported in 2023.

Supervisory Board

The role of the Supervisory Board is to supervise the policies executed by the Board of Management and the general affairs of the Company and its affiliated enterprises and to assist the Board of Management by providing advice. In discharging their role, Supervisory Board members shall be guided by the interests of Besi and its affiliated enterprises as well as the relevant interests of Besi's shareholders and other stakeholders. Supervisory Board members are required to put the interests of Besi ahead of their own interests and to act critically and independently vis-a-vis one another, the Board of Management and any particular third-party interests involved. Further, the Supervisory Board also has due regard for environmental, social and governance issues that are relevant to Besi. The Supervisory Board annually evaluates its own functioning.

Each member of the Supervisory Board is currently considered independent within the meaning of best practice provision 2.1.8 of the Dutch Corporate Governance Code. Each Supervisory Board member has the specific expertise required for the fulfilment of his or her duties. The composition of the Supervisory Board shall be diverse such that the requisite expertise, experience, nationality and cultural or other background, age, gender identity, competencies, other personal qualities and independence are present for it to carry out its duties properly as well as to better promote the interchange of ideas and different points of views amongst members. A Supervisory Board member shall be reappointed only after careful consideration. The profile criteria referred to above shall also be taken into account in the event of a reappointment.

Regulations governing the Supervisory Board ("Regulations Supervisory Board") are posted on Besi's website: **www.besi.com**.

Appointment and replacement of members of the Supervisory Board

Members of the Supervisory Board are appointed with due observance of the requisite profile for its size and composition as adopted by the Supervisory Board from time to time, subject to the provisions of Dutch law and Besi's articles of association.

Members of the Supervisory Board are appointed by the General Meeting of Shareholders. A resolution for appointment requires an absolute majority of the votes validly cast in the event and to the extent the appointment occurs pursuant to, and in accordance with, a proposal of the Supervisory Board. Such resolution requires at least two thirds of the votes validly cast representing more than one third of the issued share capital in the event and to the extent the appointment does not occur pursuant to, and in accordance with, a proposal thereto of the Supervisory Board.

Members of the Supervisory Board may be suspended or dismissed at any time by the General Meeting of Shareholders. A resolution for suspension or dismissal requires an absolute majority of the votes validly cast in the event and to the extent the suspension or dismissal occurs pursuant to, and in accordance with, a proposal of the Supervisory Board. A resolution for suspension or dismissal requires at least two thirds of the votes validly cast representing more than one third of the issued share capital in the event and to the extent the suspension or dismissal does not occur pursuant to, and in accordance with, a proposal thereto of the Supervisory Board.

Supervisory Board committees

The Supervisory Board has three committees: the Audit Committee, the Remuneration Committee and the Nomination Committee. The function of the committees is to prepare and facilitate the decision-making of the Supervisory Board. The terms of reference of the committees are posted on Besi's website: **www.besi.com**.

Remuneration Supervisory Board

The General Meeting of Shareholders shall determine the remuneration of the Supervisory Board members with due observance of the Remuneration Policy for the Supervisory Board that was adopted at the Annual General Meeting of Shareholders held on April 30, 2020. The remuneration of the members of the Supervisory Board is fixed and does not depend on the results of the Company. In addition, Besi does not grant Supervisory Board members any shares or rights to acquire shares in Besi, personal loans, guarantees or advance payments as remuneration. The Remuneration Report contains the information prescribed by applicable Dutch law on the level and structure of the remuneration of individual Supervisory Board members.

Further, none of the members of the Supervisory Board personally maintains a business relationship with Besi other than as a member of the Supervisory Board. As of December 31, 2023, none of the members of the Supervisory Board owned shares of the Company.

Conflicts of interest – members of the Supervisory Board

Any appearance of a conflict of interest between the Company and Supervisory Board members shall be prevented. If a member of the Supervisory Board has an actual or potential direct or indirect personal conflict of interest with the Company, he or she shall not participate in the deliberations and the decision-making process of the Supervisory Board for such matter. The Supervisory Board is responsible for resolving conflicts of interest involving members of the Board of Management, members of the Supervisory Board and majority shareholders. If all members of the Supervisory Board are conflicted, then the Supervisory Board shall remain authorized to adopt resolutions. No conflicts of interest of material significance to Besi and/or the members of the Supervisory Board were reported in 2023.

Diversity and inclusion

The Supervisory Board has a diverse composition in terms of experience, expertise, nationality and cultural or other background, competencies, education, gender identity and age, and is on all those points in line with the objectives of its profile and Diversity and Inclusion policy. Diversity and inclusion is a high priority on its agenda. Diversity in general and gender diversity in particular are important factors in the selection process of Supervisory Board candidates. When considering new candidates, the Supervisory Board will retain an active and open attitude with respect to the selection of female candidates. Gender is, however, only one factor of diversity. The qualifications of a particular person and the requirements for the position shall in principle always prevail over all other factors and considerations when filling a vacancy, unless otherwise required by Dutch law. The current Supervisory Board's male/female ratio is 60/40 and as such in compliance with the Supervisory Board's profile and Diversity and Inclusion policy as well as with article 2:142b of the Dutch Civil Code.

The Supervisory Board considers its current composition to be aligned with its objective for an adequate and diverse composition and in relation to the technological and global character of Besi's business as well as an adequate level of knowledge and experience in financial, economic, technological, social and legal aspects of international business and government and public administration.

At present, the Board of Management consists of one person who is Besi's Chief Executive Officer and Chairman of the Board of Management.

Besi values and encourages diversity and inclusion in its workforce and management. Besi believes diversity and inclusion helps broaden its perspective and contributes to Besi's growth. It is a priority in Besi's business strategy with a particular focus on gender diversity across its operations. Besi also recognizes the importance of diversity and inclusion in recruiting. For example, many of its product groups engage with local universities to increase diversity, inclusion and gender representation. Besi's Code of Conduct also emphasizes equal opportunity for all employees and applicants.

Besi's Diversity and Inclusion policy is focused on a comprehensive inclusion and equality approach throughout the organization, including management. Gender diversity is one of the key elements of this policy. At December 31, 2023, management consisted of 193 persons of which 17% were female (2022: 20%). Besi has the following objectives to improve diversity and inclusion within management: (i) maintain a sound balance with respect to the various aspects of diversity and inclusion (experience, expertise, nationality and cultural or other background, competencies, education, gender identity and age) within management and (ii) increase gender diversity such that a minimum of 21% of management will consist of women by 2024. Besi intends to achieve these objectives by making diversity and inclusion aspects in general and gender diversity in particular important factors in the selection process of candidates for management functions. Besi maintains an active and open attitude with respect to the selection of female candidates. In case of equal qualifications, Besi will choose the female candidate. Diversity objectives are also taken into account for employee recruitment, retention, selection, promotion, mentoring and coaching, succession planning, training and talent development. A professional executive search firm is engaged, when appropriate, to support the search process for new candidates.

Directors and Officers insurance policy

Members of the Board of Management and the Supervisory Board and certain senior management members are covered under Besi's Directors and Officers' insurance policy. Although the insurance policy provides for broad coverage, members of the Board of Management and the Supervisory Board and certain senior management members may be subject to uninsured liabilities. Besi has agreed to indemnify members of the Board of Management and the Supervisory Board and certain senior management members against certain claims brought against them in connection with their position with the Company provided that such individual acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of Besi and, with respect to any criminal action or proceedings, such individual had no reasonable cause to believe his or her conduct was unlawful.

Shareholders and the General Meeting of Shareholders

Good corporate governance requires the participation of shareholders. It is in the interest of the Company that as many shareholders as possible participate in Besi's decision-making at the Annual General Meeting of Shareholders or any Extraordinary General Meeting of Shareholders. Significant shareholder participation enables the General Meeting of Shareholder to exert such influence on the policies of the Board of Management and the Supervisory Board such that they provide important checks and balances to the conduct of the Company's business. Pursuant to Dutch law and the Company's articles of association, any decision of the Board of Management involving a major change in the identity or character of the Company and/or its affiliated enterprises are subject to the approval of the General Meeting of Shareholders.

The Board of Management provides shareholders and other parties in the financial markets with equal and simultaneous information about matters that may influence Besi's share price. Contacts between the Board of Management on the one hand and the press, analysts and shareholders on the other hand should be handled and structured carefully and with due observance of the applicable laws and regulations. Besi should do nothing which might compromise the independence of analysts in relation to the Company and vice versa.

The Board of Management and the Supervisory Board shall provide the General Meeting of Shareholders with the information that it requires for the exercise of its powers subject to such limitations allowable under applicable law. If price-sensitive information is provided during a General Meeting of Shareholders or if a response to shareholders' questions has resulted in the disclosure of price-sensitive information, then such information will be made public without delay. Good corporate governance requires significant attendance by shareholders at Besi's General Meeting of Shareholders. Therefore, Besi is actively involved in proxy solicitation as a means of increasing the attendance and participation of its shareholders at its General Meeting of Shareholders.

Amendment of Besi's articles of association

Besi's articles of association may be amended by a resolution of the General Meeting of Shareholders. A resolution of the General Meeting of Shareholders to amend the articles of association may only be adopted at the proposal of the Board of Management, which proposal requires the approval of the Supervisory Board. Those who have convened a General Meeting of Shareholders at which a proposal to amend the articles of association will be brought up for discussion must deposit at Besi's office simultaneously with the convocation a copy of the proposal in which the proposed amendment has been included for inspection by every person entitled to attend the General Meeting of Shareholders until the end of the relevant meeting. The persons entitled to attend the General Meeting of Shareholders must be given the opportunity to obtain a copy of the proposal free of charge. The proposal will also be published on Besi's website: **www.besi.com**.

External audit

The Board of Management is primarily responsible for the quality and completeness of any publicly disclosed financial reports. The Supervisory Board oversees the Board of Management as it fulfills this responsibility.

The General Meeting of Shareholders appoints the external auditor. The Supervisory Board submits a nomination for the appointment of the external auditor to the General Meeting of Shareholders upon the advice of the Audit Committee and as facilitated by the Board of Management. The Supervisory Board negotiates the terms of engagement of the external auditor, including its remuneration, the scope of the audit and the materiality to be applied, upon the proposal of the Audit Committee and after consultation with the Board of Management. The Chairman of the Audit Committee acts as the principal contact for the external auditor if, during the performance of its audit, it discovers or suspects an instance of misconduct or an irregularity. The external auditor attends the meeting of the Supervisory Board at which the report of the external auditor is discussed. The external auditor also discusses the findings and outcomes of its audit work and the management letter with the Audit Committee and the Board of Management simultaneously. The Audit Committee also meets with the external auditor without the presence of the Board of Management. The Supervisory Board supervises the external auditor's functioning.

Internal control and risk management

Besi has an internal control and risk management system that is suitable for the Company. The form and structure of this system is outlined under Risk Management.

The Company's internal control and risk management function operates under the responsibility of the Board of Management and is monitored on an ongoing basis. The Board of Management reviews the effectiveness of the design and operation of the internal control and risk management system twice a year as part of Besi's internal control procedures. The Supervisory Board oversees the internal control and risk management function and maintains regular contact with the persons fulfilling this function.

Besi's internal control system consists of a formal framework defining key risks and key controls over financial reporting, an internal control charter outlining audit systems and procedures as well as the internal control and audit plan for the year. Operational, IT, compliance, tax and fraud controls are included in this framework. The internal control system over financial reporting also contains clear accounting rules. It has been implemented in substantially all operations and material subsidiaries and supports common accounting and regular financial reporting in standard forms. In 2023, Besi's finance staff carried out all planned internal control activities and reported its findings to the Board of Management and the Audit Committee.

Besi has used an independent audit firm since 2018 to help identify and monitor potential risks of fraud, bribery and corruption in its Asian supply chain, logistics and purchasing activities and seeks to continuously enhance its internal control procedures related thereto. In addition, Besi has enhanced its global internal audit function and systems and procedures for such areas in recent years in view of increased business and risk management activities at our Chinese, Malaysian and Singapore operations.

In consideration of the above factors, the Board of Management states that for the year ended December 31, 2023:

- This Annual Report provides sufficient insights into any failings in the effectiveness of Besi's internal control and risk management systems.
- Besi's internal control and risk management systems provide reasonable assurances that the financial reporting contains no material inaccuracies.
- It is justified that Besi's financial reporting is prepared on a going concern basis considering the current state of affairs.
- This Annual Report refers to those material risks and uncertainties which are relevant to Besi's continuity for the twelve months following the preparation of this Annual Report.

Explanation of deviations from the Dutch Corporate Governance Code

Deviations from the Dutch Corporate Governance Code are listed and explained below.

Provision 1.3.1

Since the internal audit function is the responsibility of the Board of Management, the appointment and dismissal of the senior internal auditor by the Board of Management is not submitted for approval to the Supervisory Board. Instead, the Supervisory Board only oversees the appointment and dismissal of the senior internal auditor.

Provision 1.4.2 item iv

The sensitivity of the Company's results to material changes in external factors is not provided for competitive reasons. For a detailed description of material risks, reference is made to Risk Management.

Provision 2.2.1
The Company respects the rights of the member of the Board of Management who was a member at the time of the first implementation of the Dutch Corporate Governance Code. For that reason, there was no adjustment of his employment agreement.

Provision 3.2.3
The Company respects the rights of the member of the Board of Management who was a member at the time the Dutch Corporate Governance Code came into force. For that reason, it did not adjust his employment agreement as it was signed prior to that date.

Provision 4.2.3
The Company acknowledges the importance of disclosing material information to all shareholders similarly at the same moment in time. It is currently not practically possible to make every meeting and presentation to analysts and investors accessible to all shareholders. As far as practicably possible, meetings and presentations will be announced and posted on Besi's website: **www.besi.com**.

Disclosures required by the Dutch Decree Article 10 of the Takeover Directive
Under the Dutch Decree Article 10 of the Takeover Directive, the Company, being a company whose securities are admitted to trading on a regulated market, must disclose the following information in its Annual Report:

- As of December 31, 2023, the Company's issued share capital consisted exclusively of ordinary shares. Information about the Company's share capital structure can be found in "Besi's equity structure" in the Shareholder Information section and in Note 21 "Equity" to the Notes to the Consolidated Financial Statements. Information on the rights and obligations attached to such shares can be found in the Company's articles of association.
- The Company has not imposed any limitations on the transfer of ordinary shares.
- The Company is not aware of any shares having been exchanged for depositary receipts for shares.
- The Company's articles of association do stipulate a blocking procedure for the transfer of preference shares.
- The Company is not aware of any agreements with shareholders which may result in restrictions on the transfer of shares or the exercise of any voting rights.
- Information concerning ownership interests in the Company's ordinary shares as per AFM notification can be found in the Shareholder Information section under "Ownership interests in the ordinary shares".
- There are no special control rights attached to the shares.
- There is no system of control regulating any scheme granting employees' rights to acquire shares in the share capital of the Company or of a subsidiary where the control rights are not exercised directly by the employees.
- No restrictions or deadlines apply to the exercise of voting rights.
- The Company's articles of association contain the following information:
  - The appointment and dismissal of members of the Board of Management or Supervisory Board members which are also summarized in "Appointment and replacement of members of the Board of Management" and "Appointment and replacement of members of the Supervisory Board".
  - The amendment of the Company's articles of association which is also summarized in "Amendment of Besi's articles of association".
  - The powers of the Board of Management.
  - The issuance of shares in the share capital of the Company and the repurchase of shares in the share capital of the Company (including the powers of the Board of Management related thereto) which are also summarized in "Issuance of ordinary shares and pre-emptive rights", "Issuance of preference shares" and "Repurchase and cancellation of shares".
- The Company is not a party to any material agreements which take effect or are altered or terminated upon a change of control of the Company following a takeover bid other than (i) the agreement between the Company and the Foundation by which the Foundation has been granted a call option. Such information is summarized in Besi's equity structure and The Foundation contained in the Shareholder Information section and in Preference Shares contained in the Other Information section and (ii) in the indentures governing Besi's € 97.7 million bank lines of credit and in each of its Convertible Notes due 2024, 2027 and 2029.
- There is no agreement between the Company and the member of the Board of Management if his employment ceases because of a takeover bid.

Director's Statement of Responsibilities
In accordance with statutory provisions, the member of the Board of Management states, to the best of his knowledge, that:

- The Financial Statements provide a true and fair view of the assets, liabilities, financial position and result for the financial year of Besi and its subsidiaries included in the consolidation as a whole.
- The Report of the Board of Management provides a true and fair view of the position at the balance sheet date and of the performance of the business during the financial year of Besi and its subsidiaries, details of which are contained in the Financial Statements. The Report of the Board of Management provides information on any material risks to which Besi is exposed.

Board of Management
Richard W. Blickman

February 21, 2024

Remuneration Report

2023 Remuneration Report

Introduction

We are pleased to present the 2023 Remuneration Report to stakeholders. The Remuneration Committee (the "Committee") concluded that the Board of Management delivered impressive results this year with respect to the key metrics most relevant to the Company's short- and long-term sustainable value creation and business objectives despite a significant industry downturn in the assembly equipment market. Besi, under the leadership of the Board of Management, responded quickly and effectively to adverse market conditions by rapidly aligning its production and overhead with changing market conditions in order to enhance its market position, increase gross margins and maintain peer leading financial performance. Increased R&D investment continued as Besi further built out its wafer level assembly portfolio and responded effectively to the industry's capacity expansion for future generative AI and high-performance computing applications. Shareholders responded favorably to Besi's progress and prospects for the next industry upcycle, which combined with superior financial metrics and strong execution of strategic initiatives resulted in a total shareholder return of 149.7% in 2023. In addition, we distributed € 435.5 million to shareholders in the form of dividends and share repurchases which has increased the total capital allocation to shareholders since 2011 to € 1.9 billion repurchases (including the dividend proposed for 2023), representing approximately 30% of cumulative revenue during this period.

In addition, we expanded our operational footprint in Malaysia, Singapore and Vietnam this year in response to customers' re-allocation of certain production outside of China and in anticipation of the growth of hybrid bonding and other advanced packaging technologies. Further, forty-two management members and key customers participated in a four-month, comprehensive strategic review to analyze current strengths and weaknesses and formulate new initiatives for the achievement of business model objectives in the 2023-2027 period. Significant progress also was achieved on Besi's ESG agenda as we made advances in the sustainable design of our platforms, positioned ourselves to meet or exceed challenging targets set for 2024 and launched many new initiatives across the Company to further reduce our environmental footprint. Moreover, we performed a Double Materiality Assessment as a precondition for adherence to CSRD requirements in 2024. Our ESG ratings with the major publicly recognized frameworks such as Sustainalytics, S&P Global, ISS ESG and MSCI also improved materially, underscoring Besi's commitment to excel in this area. In addition, we set an objective of reaching net zero greenhouse gas emissions in our operations by 2030, incorporating all Scope 1 & 2 emissions. All such actions continued to advance Besi's future business prospects, market position and long-term sustainable value creation for shareholders.

Besi achieved exceptional value creation during the period of the current Remuneration Policy 2020-2023 including its financial and stock market performance, capital allocation, strategic positioning, new product development and ESG progress. Specifically, over the period 2020-2023, revenue, gross margins and net income each increased by 62.5%, 9.1 points and 117.8%, respectively. In addition, a total of € 1.1 billion was returned to shareholders in the form of dividends and share repurchases. Similarly, the market capitalization of Besi's shares increased from € 2.5 billion to € 10.5 billion at year end 2023. Further, our estimated market share of our addressable market increased from 28.5% in 2020 to 32.3% in 2022 with an estimated 74% market share in the advanced die placement market as defined by TechInsights. Further, we invested € 221 million in R&D during the period to develop the industry's most advanced wafer level and advanced packaging assembly portfolios. In addition, Besi organized an important development agreement with Applied Materials to enhance the commercial adoption of hybrid bonding assembly, a generational shift in advanced packaging. Hybrid bonding and other wafer level assembly technologies will usher in a new generation of heterogeneous device architectures to further artificial intelligence and high-performance computing applications in our principal end-user markets and facilitate the extension of Moore's law beyond its current limits. Finally, Besi made a substantial commitment to further its ESG ambitions during the 2020-2023 period, organizing challenging targets through 2030 including compliance with substantially all relevant frameworks and reporting requirements. We have already exceeded initial goals set for 2022 and are well on our way to meeting or exceeding targets set for 2024.

EXCEPTIONAL VALUE CREATION 2020 - 2023*

Market Cap	€ 2.5B to € 10.5B	**4.2x increase**
Revenue	Leader advanced packaging	**+62.5%**
ROAE	Best in class	**+ 9.5 points**
Net Margin	Peer leading	**+ 7.8 points**
Gross Margin	Superior through cycle profitability	**+9.1 points**
Capital Allocation	€ 1.1B	**45% of revenue**

* Market capitalization at year end 2023 versus year end 2019. Income statement items and capital allocation for four-year period 2020-2023.

SHARE PRICE OUTPERFORMANCE

Total Return	1 year	3 years	5 years
Besi	149.7%	210.3%	812.5%
Direct peers	82.5%	96.3%	276.8%
SOX index	67.0%	55.4%	289.7%

- Total Shareholder Return includes reinvestment of dividends.
- Besi returns calculated in euro. Philadelphia SOX returns calculated in US dollar.
- Peer group average consists of Kulicke & Soffa, ASM PT, and Disco Corp.

Source: Refinitiv Data Stream

Our outreach with shareholders has also increased substantially over the past five years as more investors and industry analysts have expressed interest in Besi's market segment, business and progress. The increase has been due, in part, to significant changes in our future prospects, scale, efficiency, profitability, market capitalization, shareholder composition and increased trading liquidity. As such, Besi was upgraded to the AEX in 2021. In addition, the number of research analysts covering the Company more than doubled from 9 in 2020 to 21 currently. On an ongoing basis, Besi maintains extensive and ongoing dialogue with its global shareholder base via an active investor relations program comprised of one-on-one investor calls, conferences in North America, Europe and Asia and frequent conversations with industry analysts on topics including Besi's business development, prospects, ESG and corporate governance.

Shareholder issues addressed in 2024 Remuneration Policy

A new Remuneration Policy 2024 was approved by shareholders at Besi's Annual General Meeting on April 26, 2023 ("2023 AGM") which received 94.7% support. In formulating the new policy, we hired an independent external consultant, conducted extensive shareholder engagement with approximately 25% of our shareholder base and evaluated changes in legislation, market developments and external market best practices. We gathered valuable feedback from other stakeholders as well.

The new Remuneration Policy 2024 reflects best market practices, taking into account further contribution to sustainable long-term value creation and is responsive to shareholder concerns and replaces, in particular, additional discretionary LTI performance-based awards as part of the Board of Management's remuneration in favor of traditional LTI awards only. In addition, the new remuneration policy applicable as from 2024 provides for a cap on the Board of Management's remuneration in any particular year, meaning that the total compensation award opportunity for any member of the Board of Management shall not exceed 10 times their base salary in any financial year.

The new Remuneration Policy 2024 successfully addressed a key investor concern relating to the granting of additional performance-based LTI awards on a discretionary basis. Going forward, there will be no further awards of such type. However, executive remuneration in 2024 will reflect the application of the last year of the Remuneration Policy 2020-2023. In this regard, the last block of additional performance-based LTI awards under the old policy associated with Besi's performance over the financial year 2023 was granted in January 2024.

2023 in review

The Supervisory Board applied the current Remuneration Policy 2020-2023 during 2023. This policy seeks to achieve three broad goals in connection with Besi's Remuneration Policy and decisions regarding individual compensation:

- It structures the Company's remuneration programs in a manner it believes will enable Besi to retain, motivate and attract executives capable of achieving its business objectives in an increasingly competitive global market.
- It creates a performance-oriented environment for company executives by linking remuneration to the achievement of specified business, financial and ESG objectives or related to the member's particular product group or specific area of expertise. Notably, they are linked to, and depend on, the execution of the Company's strategy in a socially responsible and sustainable manner.
- It designs remuneration programs for the Board of Management well aligned with the interests of stakeholders by linking a portion of executive compensation with the long-term performance of Besi's ordinary shares, strategy and financial performance.

The Supervisory Board also (i) reviews Besi's business and strategic objectives, (ii) undertakes risk assessments, (iii) assesses Besi's overall performance with respect to its business and strategic objectives and (iv) considers the performance of the individual member of the Board of Management versus specific business objectives. Based on these considerations, the Supervisory Board then determines a balanced mix between fixed and variable remuneration components. It also determines a set of key performance indicators linked to variable remuneration components that are aligned with Besi's business and strategic objectives.

In determining the remuneration of the Board of Management, the Committee also assesses performance realized relative to Besi's strategy and Code of Conduct. Further, the Committee takes into account the impact of the overall remuneration of the Board of Management relative to pay differentials within the Company and obtains the views of the Board of Management with respect to the level and structure of remuneration. In addition, the Committee analyzes the possible outcomes of its variable remuneration elements and how they may affect the total remuneration of the Board of Management. In this respect, the Committee evaluates the development of Besi's underlying share price as well as other factors that create variable remuneration exposure such as the Company's financial performance, business, strategy and ESG execution. Variable remuneration is primarily linked to predetermined, challenging, assessable and quantifiable financial targets which are predominantly of a sustainable nature. It is also linked to Besi's strategy including associated business, financial and sustainability objectives, values, purpose and vision, all of which are aligned with sustainable long-term shareholder value creation.

In establishing remuneration for the Board of Management, the Supervisory Board consulted PwC, an external remuneration consultant. In its evaluation of the efficacy of Besi's Remuneration Policy, the Supervisory Board asked PwC to conduct scenario analyses of the variable remuneration components under the policy including the usage of the Monte Carlo stochastic model for the expected Total Shareholder Return ("TSR") performance analysis. The probability of vesting and payout of the performance share awards was also considered in the scenario analyses. The Supervisory Board has set the performance targets based on the outcome of the scenario analyses, pay differentials, the executive's position at Besi and its internal pay ratio. Furthermore, when drafting the remuneration proposal for the member of the Board of Management, the Supervisory Board annually considers the views of the member of the Board of Management with respect to the level and structure of his own remuneration. The member of the Board of Management is not present when the Committee discusses his fixed and variable pay components.

Set forth below is a description and analysis of the circumstances contributing to compensation decisions by the Supervisory Board in 2023. Key topics include an understanding of corporate and individual performance metrics underlying remuneration decisions and feedback received from stakeholders.

Company performance

Set forth below is a table presenting Besi's key financial performance indicators for long-term value creation in 2023 versus 2022.

BESI VALUE CREATION 2023 VERSUS 2022

(€ millions)	2023	2022	Δ	Highlights
Revenue	**578.9**	722.9	**-19.9%**	• Assembly equipment downturn. Trough in Q2-23.
Gross Margin	**64.9%**	61.3%	**+3.6 pts**	• Performance significantly above peers.
Net Income	**177.1**	240.6	**-26.4%**	• Significant gross margin improvement despite downturn.
Net Margin	**30.6%**	33.3%	**-2.7 pts**	• Peer leading ROAE maintained.
Return on Avg. Equity	**33.7%**	38.6%	**-4.9 pts**	• Ranked #1 in TSR in Remuneration Reference Group.
Total Shareholder Return	**149.7%**	-20.0%	**NM**	• Record shareholder distributions.
Capital Allocation	**435.5**	416.3	**+4.6%**	

Other important factors contributing to value creation in 2023 included the following:

Peer leading financial metrics in challenging business environment
- Revenue, orders and operating profit up 62.5%, 57.2% and 132.2% versus comparable period of last industry downturn.
- Revenue development and profitability significantly exceeded peers.
- New orders received for 3D, 2.5D and silicon photonics applications for next generation AI, logic and memory devices.
- Production model aligned with changing market conditions:
  - Gross margins rose to 64.9% reflecting Besi's leadership position in advanced packaging.
  - Operating and net margins of 36.9% and 30.6% achieved despite 19.9% revenue decrease.
  - Maintained high return on average equity of 33.7%.

Expanded R&D investment in support of next generation applications

- R&D, excluding amortization and capitalization, rose to 11.0% of 2023 revenue. Up 66% versus 2019.
- Progress continued to build out Besi's advanced packaging portfolio:
  - Hybrid Bonding adoption increasing:
    - Installed base rose to 40 systems (ex. demo units), and traction in fully integrated production lines is increasing with several systems installed.
    - Number of customers increased to nine.
    - Orders and year end backlog approximately doubled versus 2022.
    - First orders received for HBM applications.
- First TCB chip to wafer delivered.
- First in-line flip chip system shipped for 2.5D HBM/logic devices.

Well positioned to meet 2024 ESG targets

- Completed 76% of ESG initiatives developed since 2020.
- Energy from renewable sources increased to 71% versus 20% in 2021.
- Scope 1 & 2 emissions intensity reduced by 38% versus 2021 baseline.
- Set objective of net zero greenhouse gas emissions in operations by 2030.
- Launch of Design-to-X initiative to enhance sustainability and reduce cost.
- Conducted Double Materiality Assessment for European CSRD reporting in 2025.
- Improved ratings with MSCI, Sustainalytics, ISS ESG and S&P Global.

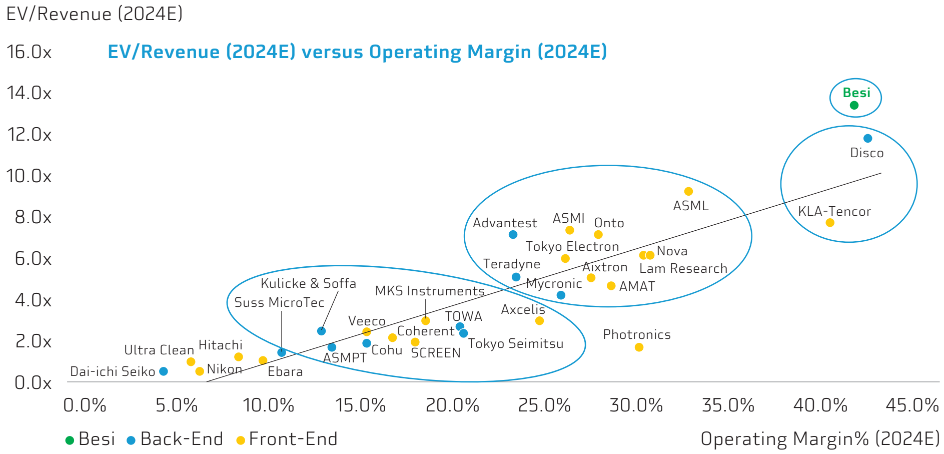
Strategic initiatives implemented to help position Besi for future growth

- Strategic Plan 2023-2027 finalized to help achieve business, financial and ESG objectives.
- Singapore cleanroom facility completed for expanded hybrid bonding service/support.
- Vietnam facility established to support customers' geographic expansion outside China.
- Technology Advisory Board formed to enhance Besi's advanced packaging strategy and competitive position.

Strong cash flow generation supports increased capital allocation to shareholders

- Solid cash flow from operations of € 208.6 million, equal to 36.0% of revenue.
- Capital allocation increased by 4.6% to € 435.5 million.
- € 300 million share buyback program completed. New € 60 million program initiated.
- € 1.9 billion returned to shareholders since 2011, including the dividend proposed for 2023.
- Solid liquidity position with cash of € 413.5 million at year end.
- Proposed 2023 dividend of € 2.15 per share. Pay-out ratio of 94%.

BESI PERFORMANCE/VALUATION IN UPPER QUARTILE OF ALL SEMICONDUCTOR EQUIPMENT COMPANIES



Source: Morgan Stanley & CapIQ. January 17, 2024. All values calendarized per year end December 2023.

As a result of the activities and leadership of the member of the Board of Management, the Supervisory Board determined that the Company is fit for purpose, has successfully retained and enhanced its position (i) as a technological leader in the highly cyclical assembly equipment industry with timely and sustainable forward strategic thinking as to Besi's internal development, (ii) in the assembly equipment market and with its key customers and (iii) relative to its direct competition. Other items were also considered by the Supervisory Board such as market developments and the views of society.

Besi strives to align the incentives for its Board of Management with its annual goals, strategic plan objectives and the long-term interests of our shareholders for sustainable growth. The Company made substantial progress on its strategic agenda and achieved exceptional financial performance during the prior Remuneration Policy period, in most cases exceeding our most optimistic targets in a highly cyclical industry. We look forward to similar success in the next Remuneration Policy period 2024-2027.

Remuneration Policy 2020-2023

The following is a summary of Besi's Remuneration Policy applicable during 2020-2023, which expired in January 2024 and was applied during the year of review, 2023. For more information, please see the Remuneration Policy 2020-2023, adopted on April 26, 2019, which is available on our website.

Remuneration Reference Group

The components underlying the remuneration of the Board of Management are regularly compared to a remuneration reference group of companies selected based on industry, size, profitability, market capitalization and geography. The following companies are included in the current remuneration reference group as adjusted per annum for any acquisition or stock delisting related thereto.

Remuneration Reference Group	
Aixtron SE	Jenoptik AG
AMG N.V.	Kendrion N.V.
ASM International N.V.	Kulicke & Soffa Industries, Inc.
Axcelis Technologies, Inc.	MTS Systems Corporation
Brooks Automation, Inc.	Siltronic AG
Cohu, Inc.	TKH Group N.V.
Corbion N.V.	Ultra Clean Holdings, Inc.
Entegris, Inc	Veeco Instruments, Inc.
Ichor Holdings, Inc.	Xperi Corporation
IMCD N.V.	

The remuneration reference group composition is reviewed by the Supervisory Board regularly and updated, if necessary, to ensure an appropriate composition. Any changes to the composition of the remuneration reference group is subject to approval of the Annual General Meeting of Shareholders.

1. Base salary

Each year, the Supervisory Board reviews the annual base salary for the member of the Board of Management and considers whether to adjust his base salary level. The base salary of the member of the Board of Management is determined relative to the median and 90th percentile base salary levels of the remuneration reference group. The Supervisory Board also considers the historic salary levels of the individual and the nature of the individual's roles and responsibilities in positioning the base salary level relative to the remuneration reference group.

2. Benefits

Benefits awarded to the Board of Management such as expense compensation, medical insurance and social security premiums are linked to base pay and are in accordance with generally prevailing market practice.

3. Pension

Different pension arrangements are provided to the Board of Management based on their salaries, local customs and the rules existing in their countries of origin. A defined contribution scheme is in place for statutory directors, of whom the CEO is currently the only one. The pension contribution on behalf of the statutory director is based on a premium ladder as in effect from 2014 of which a portion is funded directly to his personal pension account as a tax-exempt contribution and the remaining balance is paid as a taxable pension allowance which can be used to build up his net pension on a voluntary basis.

4. Short-Term Incentive (annual performance-based cash bonus)

The annual cash bonus opportunity for the member of the Board of Management is linked to the achievement of two predetermined performance conditions which include net income as a percentage of revenue and personal performance goals set by the Supervisory Board on an annual basis. As such, the performance conditions incorporate financial, non-financial and ESG objectives according to the following performance/pay-out grid.

Performance versus payout

Metric and weighting as % of total award	**At minimum performance (below threshold)**	**At target performance**	**At maximum performance**
	as % of the individual's gross annual base salary		
Net income as % of revenue (70% of STI)	0%	70%	105%
Personal performance targets (30% of STI)	0%	30%	45%
Total annual bonus pay-out	**0%**	**100%**	**150%**

These two performance conditions are explained in more detail below:

- *Net income expressed as a percentage of revenue (70% of STI):*
  The financial measure net income is preferred over other financial ratios for the Short-Term Incentive because net income is:
  - A key indicator in evaluating Besi's overall performance for the year and therefore an important contributor to shareholder value.
  - A key factor given the cyclical nature of the market in which Besi operates.
  - A financial measure that can be influenced by the member of the Board of Management.
  - A key component utilized to help determine Besi's stock market valuation.

- *Personal performance of the member of the Board of Management (30% of STI):*
  The annual criteria used to measure the personal performance of the member of the Board of Management are at the sole discretion of the Supervisory Board. Each year, the Committee proposes to the Supervisory Board a set of specific goals for the member of the Board of Management based on a variety of business, strategic, financial and ESG targets considered important to Besi's achievement of sustainable value creation in the medium-term and long-term in alignment with the Company's strategic planning.

5. Long-Term Incentive (annual conditional award of performance shares and additional performance share awards)

The Long-Term Incentive for the member of the Board of Management consists of a conditional award of performance shares based on the achievement of predetermined objectives set by the Supervisory Board over a three-year performance period, subject to continued service. The performance metrics utilized as the basis for this award include:

- *Net income as a percentage of revenue over three calendar years (50% of LTI):*
  Net income as a percentage of revenue over a three-year performance period is considered a key measure for creating sustainable long-term shareholder value.

- *Relative Total Shareholder Return ("TSR") over three calendar years (50% of LTI):*
  The TSR over a three-year performance period is also considered a key measure for determining the development of shareholder value and Besi's relative share price performance versus peers in the semiconductor equipment industry. It is also an appropriate performance measure to align the interests of the Board of Management with those of shareholders. This metric measures the development of Besi's share price, including the reinvestment of dividends, over a three-year performance period as compared to a comparator group of 19 publicly listed companies operating in the semiconductor equipment industry. Three-month share price averaging is applied at the start and at the end of the TSR performance period. The composition of the comparator group will be reviewed and adjusted by the Supervisory Board if circumstances arise which could affect the comparability of the companies involved, particularly in the event of a merger, acquisition or material change of business. Adjustments to the comparator group, including replacements, will be based on predetermined internal guidelines. The TSR comparator group currently consists of the following companies:

TSR comparator group	
Aixtron SE	Kulicke & Soffa Industries, Inc.
Applied Materials, Inc.	Lam Research Corporation
ASM International N.V.	MKS Instruments, Inc.
ASML Holding N.V.	Nova Ltd.
ASM Pacific Technology Ltd.	Onto Innovation, Inc.
Axcelis Technologies, Inc.	SÜSS MicroTec SE
Cohu, Inc.	Tokyo Electron Ltd.
DISCO Corporation	Tokyo Seimitsu Co., Ltd.
Entegris, Inc.	Veeco Instruments, Inc.
FormFactor, Inc.	

Conditional award

The at target number of performance shares conditionally awarded will be determined by the Supervisory Board based on a ratio equal to (i) 175% of the individual's gross annual base salary divided by (ii) the average closing price of Besi's shares for all trading days in the calendar quarter immediately preceding the start of the three-year performance period.

Vesting of performance shares

The vesting of performance shares awarded will be determined at the end of the three-year performance period depending on Besi's actual performance during such period according to the following grid:

Performance versus payout

Metric and weighting as% of total award	**At minimum performance (below threshold)**	**At target performance**	**At maximum performance**
	as % of the individual's gross annual base salary		
Net income as % of revenue (50% of LTI)	0%	50%	75%
Relative TSR performance (50% of LTI)	0%	50%	75%
Total number of shares vesting	**0%**	**100%**	**150%**

As shown in the table above, 50% of the vesting of the conditional awards is linked to Besi's net income relative to its revenue over a three-year performance period. The other half is linked to Besi's relative TSR performance over a three-year performance period. The performance shares awarded from 2020 onwards subject to Besi's TSR performance are based on the actual absolute ranking of Besi within the comparator group. In addition, vested shares are subject to a two-year lock-up period which means that the member of the Board of Management will have to retain such shares for two years following the vesting date. However, he will be allowed to sell shares sufficient to cover any income tax liability resulting from the vesting of performance shares.

Vesting is determined based on the following schedule whereby straight-line vesting percentages are applied on a pro rata basis between ranks 3 and 12 for awards made as from 2020:

Besi TSR ranking relative to comparator group	Vesting percentage
Top 3	75%
Rank 6	50% (at target)
Rank 12	25%
Rank 13 – Rank 20	0%

Performance adjustment

Under the previous policy, the Supervisory Board may at its absolute discretion upwardly or downwardly adjust the number of performance shares awarded by a maximum of 20%. This discretionary performance adjustment may be applied to reflect the Company's overall performance and market developments and further align the interests of the Board of Management with those of shareholders. In accordance with the Remuneration Policy 2020-2023, this performance adjustment was eliminated for performance shares granted as from 2020 onwards.

Clawback and ultimate remedium

The Short-Term Incentive and Long-Term Incentive components for the Board of Management are subject to clawback provisions. In addition, risk assessment tests are in place and measures are included in the variable remuneration documentation for the Board of Management to ensure that shareholders' interests are protected. In this respect, the Supervisory Board holds the discretionary authority to reclaim all or part of the Short-Term Incentive and Long-Term Incentive if such variable remuneration was made based on incorrect financial data or other data or in the case of fraud, gross negligence, willful misconduct or any activity detrimental to the Company. This clawback is applicable to both the vested and unvested part of the Long-Term Incentive components.

The Short-Term Incentive and Long-Term Incentive components for the Board of Management are also subject to ultimate remedium clauses under which the Supervisory Board can adjust the value of the conditional variable remuneration components downwards as well as upwards. The adjustment can be made if the Supervisory Board is of the opinion that an unfair result would be produced due to extraordinary circumstances.

Additional performance share awards

The Supervisory Board may, at its absolute discretion and upon the recommendation of the Committee, award up to a maximum of 120,000 additional performance shares to the Board of Management in the event of extraordinary achievements or exceptional performance during a fiscal year. Market developments and the views of society are also considered in addition to the performance of the Company and the Board of Management.

If the number of Long-Term Incentive performance shares awarded under the policy vest between at target and maximum performance levels (stretched performance), such Performance Shares related to stretched performance levels will be included as part of the maximum 120,000 additional performance shares that can be awarded to members of the Board of Management at the discretion of the Supervisory Board. In addition, the Supervisory Board has the right to downwardly adjust the number of additional performance shares awarded to the Board of Management by up to a maximum of 20% in case of a market downturn or a high underlying share price.

Additional performance shares awarded vest immediately but are subject to a five-year lock-up period, which means that the Board of Management will have to retain them for five years following the award date. However, the Board of Management is allowed to sell shares sufficient to cover any income tax liability arising from the vesting of additional performance shares. Additional performance share awards may also be subject to additional terms and conditions as determined by the Supervisory Board.

Number of shares available

The aggregate total number of performance shares available under Besi's Long-Term Incentive arrangement (for all participants including the Board of Management) shall not exceed 1.5% of the total number of outstanding shares at December 31 of the year prior to the year in which the performance shares are awarded.

Loans

As a matter of policy, the Company does not provide loans to members of the Board of Management.

Employment contracts/service contracts
Service contracts with any new member of the Board of Management will in principle be entered into for a period of four years. Existing employment contracts for members of the Board of Management with an indefinite period of time will not be replaced by contracts with a limited period or by contracts with different conditions. The current notice period applicable to the member of the Board of Management is six months.

Severance payment
In the event of dismissal, the remuneration paid to members of the Board of Management may not exceed the individual's gross annual base salary (fixed component). If the maximum of one-year's base salary would be manifestly unreasonable for a member of the Board of Management who is dismissed during his first term of office, such member of the Board of Management shall be eligible for severance pay not exceeding two times their annual base salary.

Application Remuneration Policy 2020-2023

This section refers to the decisions made during the year under review according to the 2020-2023 Remuneration Policy. The Supervisory Board, upon the recommendation of the Committee, applied the Remuneration Policy 2020-2023 in 2023 without exception as set forth below. The only member of the Board of Management in 2023 was Richard W. Blickman, Besi's CEO.

1. Base salary

The base salary of the CEO is reviewed annually, considering the remuneration reference group. At the end of 2022, the base salary of the CEO was reviewed taking into consideration the remuneration reference group as well as developments at the Company and in the industry. The Committee analyzed and considered the outcome of this review and recommended to the Supervisory Board a base salary set between the median and 90th percentile levels of the remuneration reference group. The Supervisory Board, upon the recommendation of the Committee, decided to increase the 2023 base salary of the CEO from € 600,000 to € 650,000. This increase was also included and approved in the Remuneration Policy 2024.

2. Benefits

Other benefits include expense compensation, medical insurance and social security premiums.

3. Pension

Since the CEO has reached the applicable retirement age in the Netherlands, contributions to all of his pension plans have terminated. Any pension contribution is based on the premium ladder in the policy (32% of base salary) and is paid as a taxable pension allowance.

4. Short-Term Incentive (annual performance-based cash bonus)

The Short-Term Incentive awarded to the member of the Board of Management is based on the following predetermined performance conditions: (i) net income as a percentage of revenue and (ii) personal performance of the member of the Board of Management relative to certain non-financial and ESG goals of importance for 2023. The Committee reviewed at year end the quality of the predetermined financial, non-financial and ESG performance goals and the sustainable value delivered with respect thereto in determining the Short-Term Incentive awarded for 2023.

As a result, the total annual cash bonus for the member of the Board of Management was as follows:

Metric and weighting as % of total award	Payout (€)
Net income as % of revenue (70% of STI)	682,500
Personal performance targets (30% of STI)	292,500
Total annual bonus pay-out	**975,000**

(a) Net income as a percentage of revenue (70% of STI)
The targets set for the 'net income expressed as a percentage of revenue metric are as follows:

Metric and weighting as % of total award	At minimum performance (below threshold)	At target performance	At maximum performance
	as % of the individual's gross annual base salary		
Net income as % of revenue (70% of STI)	0%	70%	105%
Personal performance targets (30% of STI)	0%	30%	45%
Total number of shares vesting	**0%**	**100%**	**150%**

Outcome

Target	Net Income as % of revenue	Vesting Schedule
Minimum	<5%	0%
Target	5-12%	0-70%
Maximum	12-20%	70-105%
Actual NIR/STI payout	30.6%	105%

Besi's 2023 net income as a percentage of revenue was 30.6%, well above the maximum pre-defined target range of 20%. As a result, and upon the recommendation by the Committee, the Supervisory Board awarded the member of the Board of Management a cash bonus equal to 105% of his annual base salary, or € 682,500, for this financial performance condition.

(b) Personal performance of the member of the Board of Management (30% of STI)

The Committee reviewed the performance realized by the member of the Board of Management with respect to five equally weighted and pre-defined personal, non-financial and ESG performance objectives representing 30% of the potential total STI cash bonus. These five pre-defined personal, non-financial and ESG performance objectives are set forth below along with achievements against such objectives in 2023:

Pre-defined performance objectives	Weighting	Achievements / Overachievements 2023

• Update Besi's Strategic Review 2023-2027 and the initiatives related thereto.
• Identify resources, expenditures and timescale to carry out these initiatives and review quarterly with the Supervisory Board.
• The Strategic Review should include competitive analysis.
	20%	• Strategic review 2023-2027 completed in July 2023.
		• Review conducted over 16 weeks. Involved participation of 42 management members and key customers.
		• Review focused on:
		  • Performance versus current initiatives.
		  • Development of new initiatives.
		  • Analysis of Besi's business model and ESG targets and the means to achieve such targets.
		  • Review of Engine 1 and Engine 2 business, product strategy and financial plans.
		  • Competitive analysis and management and financial resources required to execute such targets.
		• Board of Management shared findings with the Supervisory Board at regular intervals.
		• Opened new tooling facility in Vietnam. First production in Q4-23.
		• Office established in India. First orders received.
		• Significant financial outperformance versus peers.
		• Bi-weekly reviews on progress of strategic initiatives by management.
		• Technology Advisory Board established to enhance Besi's advanced packaging development and market position.

• Define and investigate potential M&A roadmap; big picture and adding additional products.	20%	• Several deep dives performed on potential M&A candidates, particularly in wafer level assembly.
• Implement Management Development and Succession Planning for CEO, Management Team and key staff, including top performers. • Review with the Supervisory Board.	20%	• Overall management succession plan reviewed bi-annually including key staff related thereto. • CTO responsibilities re-assigned to various senior management personnel. • New senior personnel hired for oversight and management of ESG activities. • No vacancies in senior management at year end 2023. • Specific succession topics and planning for the Board of Management and management team members discussed with the Supervisory Board.

Pre-defined performance objectives	Weighting	Achievements / Overachievements 2023

• Implement the 2023 R&D programs (below 10 nm) for major customers.
• Continue to assess requirement, timescales and expenditure and report regularly on these important programs.
• Include assessment of account penetration.
• Hybrid bonding:
  • Continue roll-out hybrid bonding to logic and memory applications.
  • Develop partnership with Applied Materials to next level, installing integrated tools at major customers.
  • Establish customer application lab for hybrid bonding and chip to wafer in Besi Singapore.
	20%	• Expanded R&D investment continues in support of next generation, <10 nm assembly applications.
		• Gross R&D spending of € 63.9 million equal to 11.0% of 2023 revenue. Up 66% since 2019.
		• Hybrid bonding progress continues:
		  • Broad based engagement with leading semiconductor manufacturers for generative AI and high-performance computing.
		  • Commercial adoption expanded to nine customers.
		  • Installed base increased to 40 units (ex. demo units), and traction in fully integrated production lines is increasing with several systems installed.
		  • Significant orders received in H2-23 for delivery in 2024.
		  • Orders and year end backlog approximately doubled versus comparative levels in 2022.
		  • First orders received for use in HBM applications.
		  • First orders received from leading subcontractors.
		  • Shipped first 100nm hybrid bonding system to customers.
		• First TCB chip to wafer system shipped.
		• In-line high-performance flip chip system delivered for 2.5D HBM/logic applications.
		• Singapore cleanroom facility completed for sales/service support of Besi's wafer level portfolio.
		• Significant orders received in H2-23 for silicon photonics and HBM and AI devices.

• Further enhance environmental, social and corporate governance and sustainability strategy as presented in our Annual Report 2022. • Prepare for reporting based on CSRD in 2025. • Prepare a plan to meet the net zero commitment as set out in the Annual Report.	20%	• Progress continues versus Besi's 2024 ESG targets. • Conducted Double Materiality Assessment for European CSRD reporting in 2025. • Improved ratings with MSCI, Sustainalytics, ISS ESG and S&P Global. • Scope 1 & 2 emissions intensity declined by 38% versus 2021 baseline. • Set net zero carbon emissions by 2030 for Scope 1 & 2 emissions. • Energy from renewable sources increased to 71% versus 20% in 2021. • Completed 76% of ESG initiatives developed since 2020. • Launch of Design-to-X initiative to enhance sustainability and reduce cost. • New initiatives developed particularly aimed at reducing Besi's environmental footprint. • 2023 employee survey indicated high levels of participation and engagement. Six of seven categories above high-tech norm. • On target to meet 2024 ESG targets.
TOTAL	**100%**	

During 2023, the Committee regularly reviewed the progress of the pre-defined personal, non-financial and ESG performance objectives including the assessment of new initiatives developed during the year. The effectiveness and progress of the objectives set were tested and monitored by the Supervisory Board during the year based on strategic updates provided. An overall assessment was also completed after year end 2023 including a review of customer satisfaction, strategic plan execution and effectiveness, wafer level assembly and ESG progress achieved and cost reduction initiatives realized.

Based on this review and upon the recommendation by the Committee, the Supervisory Board decided to award the member of the Board of Management a cash bonus related to his personal performance equal to 45% of his annual base salary for 2023, or € 292,500.

Total Short-term Incentive

The sum of the financial and non-financial components, including ESG targets, comprising the total cash bonus for the year 2023 equaled € 975,000, or 150% of the annual base salary of the member of the Board of Management. The Supervisory Board, upon the recommendation of the Committee, unanimously agreed on such cash bonus based on the Company's peer leading revenue, net income and cash flow and operating efficiency in the face of a significant industry downturn, increased gross margins, progress on its wafer level assembly agenda as well as its return on average equity, relative share price development, increased capital allocation, strategic plan execution, peer leading financial metrics and progress on ESG and sustainability goals.

5. Long-Term Incentive (annual conditional award of performance shares)

Grants of LTI shares

The at target number of conditional performance shares awarded was calculated based on 175% of the gross annual base salary of the member of the Board of Management divided by the average closing share price for all trading days in the last calendar quarter of the year immediately preceding the start of the three-year performance period. The number of shares that will actually vest will be based on the following predetermined performance conditions:

(i) Net income as a percentage of revenue over three calendar years (50% of LTI).
(ii) Besi's share price development including the reinvestment of dividends during a three-year performance period versus the TSR comparator group of 19 listed companies operating in the semiconductor equipment industry (50% of LTI).

The Long-Term Incentive is subject to continued employment. Outstanding conditional grants, made on annual basis are as follows:

Conditional grants outstanding as of December 31, 2023		**Performance period**	
	2023-2025	**2022-2024**	**2021-2023**
Conditionally awarded at target	20,604	13,927	25,143
Average share price Q4 preceding year (€)	55.2070	75.3924	41.7606
Year of vesting	2026	2025	2024
Range of shares potential vesting (0-150%)	0-30,906	0-20,891	0-37,715

Vesting of LTI shares

The vesting of LTI shares (conditional performance shares) for the member of the Board of Management for the 2021-2023 period was based on the following factors:

(i) Net income as percentage of revenue over the three-year performance period of 34.4% over-achieved the maximum pre-defined target of 15% resulting in a vesting of 75% of performance shares associated with this portion of the award (50% of the LTI).
(ii) Besi ranked fourth within the TSR comparator group resulting in a vesting of 66.67% associated with this portion of the award (50% of the LTI).

Target	**Net Income as % of revenue over 3 years (50% of LTI)**	**Vesting percentage**	**Besi TSR ranking relative to comparator group (50% of LTI)**	**Vesting percentage***	**Total LTI award vested**
Minimum	< 5%	0%	Top 3	75%	
Target	5%-11.7%	0-50%	Rank 6	50%	
Maximum	11.7%-15%	50-75%	Rank 12	25%	
			Rank 13 - 20	0%	
Actual	**34.4%**	**75%**	**Rank 4**	**66.67%**	**141.67%**

* Vesting percentage based on linear extrapolation between Top 3, Rank 6 and Rank 12 levels.

As a result, 141.67% of the 25,143 shares related to the 2021 performance share award will vest on April 25, 2024, subject to the member of the Board of Management's continued employment until such date. The vested shares are subject to a two-year lock-up period except for those shares necessary to be sold to cover any withholding/income tax liabilities arising therefrom.

The following table presents a summary of the applicable performance incentive zones and performance realized for both the STI and LTI awards in 2023:

BESI SHARE PRICE OVER LTI PERIOD

Executive		Performance criteria applicable for STI and LTI	Relative weighting	Performance incentive zones (as % of base salary): Threshold levels	Target levels and corresponding award	Maximum performance levels and corresponding award	Performance realized and actual award outcome 2023
R.W. Blickman, CEO	STI	Net income as % of revenue ("NIR")	70%	Below threshold (0%); vesting starting at threshold levels	Target performance (70%); € 455,000	Maximum performance (105%); € 682,500	Maximum performance (105%); € 682,500
		Personal performance (see above)	30%	Below threshold (0%); vesting starting at threshold levels	Target performance (30%); € 195,000	Maximum performance (45%); € 292,500	Maximum performance (45%); € 292,500
	LTI	Net income as % of revenue	50%	At threshold (25%); 0 shares Below threshold (0%)	At target (50%); 12,572 shares	Maximum performance (75%); 18,857 shares	Vesting at maximum level (75%); 18,857 shares
		Relative Total Shareholder Return (performance incentive zone depending on actual ranking of Besi in reference group, see above)	50%	At threshold (25%); 6,286 shares Below threshold (0%)	At target (50%); 12,571 shares	Maximum performance (75%); 18,857 shares	Vesting at rank 4 level (66.67%); 16,763 shares
		Additional performance shares (see below)					88,020 shares

Additional performance share awards for the member of the Board of Management
Under the Remuneration Policy 2020-2023, the Supervisory Board may, upon recommendation of the Committee, award additional performance shares to the member of the Board of Management for extraordinary achievements or exceptional performance in the prior year, up to a maximum of 120,000 shares. In January 2023, the Supervisory Board awarded the member of the Board of Management 88,020 additional performance shares for achievements realized in 2022. This award was made following the review, inter alia, of quantitative and qualitative financial and strategic/non-financial performance criteria applied for determining whether overperformance was achieved. The award reflected (i) a downward adjustment (24,000 shares) from the potential maximum award and (ii) the subtraction of 7,980 LTI shares due to their vesting between target and maximum performance (stretching performance) of the NIR element, both in accordance with the provisions of the Remuneration Policy 2020-2023. The value of the downward adjustment equaled € 1.5 million.

The financial criteria used to determine exceptional performance in a particular year represent a broader and more challenging set of financial targets than Besi's STI and LTI financial criteria including Return on Average Equity ("ROAE") and Cash Flow from Operations ("CFO")/Revenue in addition to Net Margin ("Net Income/Revenue"). They represent 90% of the total potential additional performance share award and are based on exceeding thresholds for each of 1- and 3-year average periods. Such criteria are set forth below:

	Performance versus payout for one year and three-year average periods			**2022 performance**	
Measure	**No award**	**50%+ award (pro-rata)**	**100% max award**	**1 year**	**3 year average**
Net margin (30% of award)	< 20%	≥ 20% < 25%	≥ 25%	33.3%	34.4%
ROAE (30% of award)	< 20%	≥ 20% < 25%	≥ 25%	38.6%	45.1%
CFO/Revenue (30% of award)	< 25%	≥ 25% < 30%	≥ 30%	37.6%	37.3%

- Net margin defined as Net Income/Revenue. ROAE defined as Return on Average Equity. CFO/Revenue defined as Cashflow from Operations/Revenue.

The award of additional performance shares pursuant to this component was also made due to the recognition of the following other important business factors in 2022:
- Exceptional performance above STI and LTI targets.
- Achievement of peer and industry leading gross and net margins of 61.3% and 33.3%, respectively, and return on average equity of 38.6.%.
- Continued maintenance of the significant performance gap between Besi and its peers in terms of key financial metrics such as gross margin, net margin, average return on equity and cash flow generation relative to revenue even despite adverse pandemic influences, supply chain challenges and a significant industry downturn.
- Achieved first commercial production of hybrid bonded devices in Q4-22.
- Successful development and commercial introduction of hybrid bonding and embedded bridge die attach systems.
- Capital allocation of € 416.3 million, representing an increase of 131.9% over 2021.

In addition, the Committee reviewed the performance realized by the member of the Board of Management with respect to four equally weighted and pre-defined personal, non-financial and ESG performance objectives representing 10% of the potential award of 120,000 shares. These four pre-defined personal, non-financial and ESG performance objectives were:

Pre-defined performance objectives	Weighting	Achievements / Overachievements 2022
• Progress on product strategy	25%	• Successfully completed enhancements as per plan for next generation platforms. • Overcame supply chain and COVID-19 risks to deliver systems on timely basis to customers. • Gross margin increased to 61.3% versus 59.6% in 2021 despite 29.3% order decrease. Re-affirmed Besi's leading market position. • Gross R&D investment increased by € 11.7 million, or 23% versus 2021. 66% increase over past three years.
• Capital allocation – optimize shareholder value through dividends, share repurchases, acquisitions and external financing	25%	• In 2022, capital allocation increased to € 416.3 million, up 132% versus € 179.5 million in 2021. • Successful placement of € 175 million Convertible Notes due 2029 at exercise price of € 115.50 per share. • € 185 million share repurchase program completed in July 2022. • New € 300 million share repurchase plan initiated in August 2022. • Dividend proposed of € 2.85 per share. Represents ~92% payout ratio. • Peer leading return on average equity of 38.6% in 2022 maintained despite significant assembly market downturn. • Total capital allocation since 2011 increased to € 1.3 billion. Represented ~25% of total revenue during period. • Five-year average return on average equity of ~40% based on organic growth and effective capital allocation program. • Over past three years, Besi market capitalization has increased by 80% to € 4.4 billion in 2022. • TSR of 84% past three years and 108% past five years. • Significant outperformance versus direct peers, SOX index and REM reference group over three-year period. • Shareholder value also enhanced via increased shareholder outreach including: (i) expanded research coverage, (ii) expanded number of investor conferences, (iii) expanded number of research and investor calls during year. • Research coverage expanded to 14 companies.
• People wellbeing – diversity and inclusion, employee health and safety, employee development and engagement	25%	• Increased % of female managers to 20% versus 18% in 2021 and 14% in 2019 (base line year for comparison). • Increased % local managers to 88% versus 87% in 2021. • Maintained COVID-19 health and safety measures.
• Responsible business – ethics and compliance, responsible supply chain, community impact, tax practices	25%	• No reported violations of Besi's Code of Conduct. • Compliant with tax obligations where factual economic activities take place. • Participated in several community outreach projects. • Improved overall responsible supply chain targets. • Purchasing Volume ("PV") General Work Agreement or General Procurement Contract signed increased from 64% to 77%. • PV Conflict Free Sourcing Initiative signed increased from 66% to 73%.
TOTAL	**100%**	

Based on the actual performance relative to the strategic/ESG objectives set for 2022, the Supervisory Board judged that the execution of strategic initiatives proved to exceed the challenging goals and timelines initially set at the beginning of the year. As such, 10% of the maximum potential award of 120,000 shares (12,000 shares) was available to be awarded to the member of the Board of Management in January 2023.

Based on the actual performance achieved against each of the defined financial and non-financial targets, the Supervisory Board approved an award of 88,020 additional performance shares relative to the maximum potential award of 120,000 shares available to the member of the Board of Management. In so doing, the Supervisory Board applied the maximum downward adjustment from the maximum award permitted under the plan (20% or 24,000 shares). The Supervisory Board considered several issues in applying the maximum discount permitted under the plan to the compensation paid to the member of the Board of Management in 2023. They considered the absolute quantum payment due to the member of the Board of Management resulting from the overperformance of the compensation metrics and the substantial long-term increase in Besi's share price between 2019 and 2022 in their decision to apply a maximum discount of 20%. In addition, they compared executive compensation paid at Besi versus comparable companies with similar business, geographic and market capitalization metrics such as Besi. Further, they considered how the award would be perceived relative to wider workforce pay, the views of society and the use of downward adjustments according to local market practice. The shares vested on January 19, 2023 and are subject to a five-year lock-up period which means that the member of the Board of Management will have to retain such shares for five years following the vesting date.

In addition, the award of additional performance shares to the member of the Board of Management was supported by an analysis of (i) Besi's performance versus the median of all industry peers used in our TSR-comparator group and (ii) its alignment with the median remuneration of all companies used in our remuneration reference group. This analysis included both one-year and three-year rolling performance periods wherein return on average equity, gross margin and the ratio of cash flow as a percentage of revenue were also considered, reviewed and analyzed in addition to the net income as a percentage of revenue metric as applied under the Remuneration Policy.

The following table presents the shares awarded or due to the member of the Board of Management for the last five reported financial years and unvested or subject to a holding period as of December 31, 2023:

						Information regarding the reported financial year						
	The main conditions of share award plans					Opening balance	During the year			Closing balance		
Name of Director, position	Specification of plan	Performance period	Award date	Vesting date	End of holding period	Shares awarded at the beginning of the year	Shares awarded	Performance adjustments	Shares vested	Shares subject to a performance condition	Shares awarded and unvested at year end	Shares subject to a holding period
R. W. Blickman, CEO	2019 PSP	Jan 1, 2019 - Dec 31, 2021	Apr 26, 2019	Apr 29, 2022	Apr 29, 2024	–	–	–	–	–	–	41,109
	2020 add. PSP		Jan 23, 2020	Jan 23, 2020	Jan 23, 2025	–	–	–	–	–	–	103,000
	2020 PSP	Jan 1, 2020 - Dec 31, 2022	Apr 30, 2020	Apr 26,2023	Apr 26, 2025	37,241	–	–	37,241	–	–	37,241
	2021 add. PSP		Jan 21, 2021	Jan 21, 2021	Jan 21, 2026	–	–	–	–	–	–	100,000
	2021 PSP	Jan 1, 2021 - Dec 31, 2023	Apr 30, 2021	Apr 25, 2024	Apr 25, 2026	25,143	–	10,477	–	35,620	35,620	–
	2022 add. PSP		Jan 20, 2022	Feb 17, 2022	Feb 17, 2027	–	–	–	–	–	–	70,000
	2022 PSP	Jan 1, 2022 - Dec 31, 2024	Apr 29, 2022	AGM 2025	AGM 2025 + 2 years	13,927	–	–	–	13,927	13,927	–
	2023 add. PSP		Jan 19, 2023	Jan 19, 2023	Jan 19, 2028	–	88,020	–	88,020	–	–	88,020
	2023 PSP	Jan 1, 2023 - Dec 31, 2025	Apr 26, 2023	AGM 2026	AGM 2026 + 2 years	–	20,604	–	–	20,604	20,604	–
					Total	**76,311**	**108,624**	**10,477**	**125,261**	**70,151**	**70,151**	**439,370**

In January 2024, the Supervisory Board approved an award of 70,000 additional performance shares relative to the maximum potential award of 120,000 shares available to the member of the Board of Management, subject to adoption of the 2023 annual accounts at the 2024 AGM. The award reflected (i) a 20% downward adjustment (24,000 shares) from the potential maximum award and (ii) the subtraction of 10,477 LTI shares due to their vesting between target and maximum performance (stretched performance) of the NIR and TSR elements, both in accordance with the provisions of the Remuneration Policy. In addition, a further downward adjustment of 15,523 shares was agreed with the member of the Board of Management due to Besi's 141.2% share price increase in 2023. As a result, a total of 70,000 additional performance shares were awarded to the member of the Board of Management. The downward adjustment of additional performance shares in 2024 related primarily to the quantum amount of the award in 2023 and in no way reflected dissatisfaction with his performance, which was deemed to be exceptional.

Such shares are subject to a five-year lock-up period, which means that the member of the Board of Management will have to retain such shares for five years following the vesting date. In accordance with IFRS 2 ("share-based payments"), expenses for such additional performance shares will be recognized in the first quarter of 2024 since the award was made and communicated in the first quarter of 2024. This 2024 award reflects the last payment of additional performance shares to the member of the Board of Management under the Remuneration Policy 2020-2023.

Clawback and ultimate remedium

In accordance with Dutch law and the Remuneration Policy, the Short-Term Incentive and Long-Term Incentive components for the member of the Board of Management are subject to clawback provisions and ultimate remedium clauses. During 2023, no circumstances were identified by the Supervisory Board that could result in any adjustments or clawback.

Remuneration of the Board of Management

Remuneration of the member of the Board of Management recognized by the Company in its Financial Statements for the years ended December 31, 2023 and 2022 was as follows:

(€, except for performance shares)	Year ended December 31, 2023	2022
Base salary	650,000	600,000
Annual cash bonus	975,000	900,000
Other benefits[1]	257,529	232,910
Total cash benefits	**1,882,529**	**1,732,910**
Pension contribution	–	12,430
Equity compensation benefits: Incentive Plan[2]	1,547,777	1,326,796
Total remuneration, excluding discretionary elements	**3,430,306**	**3,072,136**
Equity compensation benefits: additional performance shares[3]	5,529,416	5,223,400
Total remuneration	**8,959,722**	**8,295,536**
Conditional performance shares awarded[4]	20,604	13,927

[1] Other benefits include expense compensation, medical insurance, employer social security contributions and for 2023 and 2022 a taxable pension allowance of € 214,756 and € 187,262, respectively.

[2] Expenses recognized in 2023 and 2022 for performance shares awarded from 2019 to 2023 made under the Incentive Plan as determined in accordance with IFRS.

[3] Expenses recognized in 2023 and 2022 for the additional performance share award of 88,020 shares which vested on January 19, 2023 and of 70,000 shares which vested on February 17, 2022 as determined in accordance with IFRS.

[4] Performance shares for 2023 and 2022 may vest in 2026 and 2025, respectively, subject to continued service and the actual performance during the performance period 2023-2025 and 2022-2024, respectively.

Other remuneration information

The actual cash remuneration paid by the Company to the member of the Board of Management and the value of the vested equity remuneration for the member of the Board of Management for the years ended December 31, 2023 and 2022 were as follows:

(€)	Year ended December 31, 2023	2022
Base salary	650,000	600,000
Fringe benefits	257,529	232,910
Total fixed remuneration	**907,529**	**832,910**
One-year variable	6,504,416	6,123,400
Equity compensation benefits: Incentive Plan	3,049,293	2,414,743
Total variable remuneration	**9,553,709**	**8,538,143**
Pension expense	–	12,430
Total remuneration	**10,461,238**	**9,383,482**
Proportion of fixed and variable remuneration	9%/91%	9%/91%

The difference between the total remuneration paid to the member of the Board of Management in 2023 as recognized in the Company's Financial Statements (€ 8,959,722) and the actual cash remuneration paid and value of the vested equity remuneration for the member of the Board of Management (€ 10,461,238) was primarily due to the share price variation between the grant dates and vesting date used for determining the value of LTI share-based compensation.

Loans

At the end of 2023, no loans, advances or guarantees were provided or outstanding to the CEO in accordance with the Remuneration Policy.

Summary compensation and key performance metrics 2019-2023

The following table presents the items used to evaluate remuneration and company performance over the last five reported financial years:

						Year ended December 31,
		2023	**2022**	**2021**	**2020**	**2019**
Director's actual cash remuneration and value of equity remuneration						
R.W. Blickman, CEO	Board of Management (€)	10,461,238	9,383,482	8,698,528	7,066,003	6,068,127
	Annual change	11%	8%	23%	16%	-33%
Company performance						
Net income as % of revenue realized		30.6%	33.3%	37.7%	30.5%	22.8%
Total shareholder return (base 2018 = 100%)		913%	365%	457%	294%	199%
Average actual cash remuneration and value of equity remuneration						
Employees of the Company, excluding CEO (€ thousands)		80.4	73.6	70.8	68.2	64.8
Annual change		9%	4%	4%	5%	0%
Internal pay ratio*		115	115	128	100	72

* The internal pay ratio is calculated based on the annual total remuneration of the CEO relative to the average annual remuneration of the employees of the Company as reported in accordance with IFRS and in accordance with the requirements under the Dutch Corporate Governance Code. The Remuneration Committee noted that certain factors influence the internal pay ratio. The internal pay ratio of 115 in 2023 was equal to 2022 and decreased versus 2021 as the total 2023 remuneration of the CEO as reported in accordance with IFRS increased by 1.7% versus 2021, whereas the average remuneration of the other employees in accordance with IFRS increased by 17%. The internal pay ratio is mainly impacted by the value of the equity compensation awarded to the CEO and as such aligned with the share price performance. Given the dependence on the share price development, the Remuneration Committee does not have a preferred ratio. Instead, remuneration of employees and the CEO should be in line with the relevant internal and external references for the relative weight of the position, responsibilities and performance.

Shares held by members of the Board of Management

Members of the Board of Management are expected to hold Besi shares as a long-term investment to better align their interests with those of shareholders. As per a resolution approved at the 2023 AGM, the Chairman of the Board of Management is expected to hold shares in an amount equal to three times his base salary (or € 1,950,000 based on his 2023 salary). Other members of the Board of Management are expected to hold shares in an amount equal to two times their base salary. The table below shows the holdings of the member of the Board of Management as of December 31, 2023:

Board of Management	2023 base salary in €	Number of shares held	Ownership ratio*
Richard W. Blickman	650,000	1,342,098	282x

* The ownership ratio is calculated based on the number of shares held by the member of Board of Management multiplied with the share price at December 31, 2023, divided by the base salary.

Remuneration members of the Supervisory Board

The remuneration of the members of the Supervisory Board is reviewed on an annual basis. The Annual General Meeting of Shareholders on April 26, 2023 approved the Remuneration Policy of the Supervisory Board.

The total cash remuneration of the members of the Supervisory Board for the five years ended December 31, 2023 was as follows, as reported by the Company:

(€)					Year ended December 31,
	2023	2022	2021	2020	2019
R. Norbruis – Chairperson[1]	52,800	–	–	–	–
N. Hoek – Member and Chair Audit Committee	66,000	66,000	66,000	66,000	66,000
C. Bozotti – Member and Chair Remuneration Committee	66,000	66,000	64,900	62,700	62,700
E. Eckstein – Member and Chair Nomination Committee	66,000	64,900	20,900	–	–
L. Oliphant – Member	68,700	62,700	41,800	–	–
Former members of the Supervisory Board:					
L.J. Hijmans van den Bergh[1]	25,800	79,200	79,200	79,200	53,900
D.J. Dunn	–	–	22,000	66,000	66,000
M. ElNaggar	–	–	41,800	68,700	70,700
T. de Waard	–	–	–	–	26,400
K.W. Loh	–	–	–	–	26,900
Total remuneration	**345,300**	**338,800**	**336,600**	**342,600**	**372,600**

[1] Mr Richard Norbruis was appointed as a member of Besi's Supervisory Board at the 2023 AGM on April 26, 2023. Mr Norbruis succeeded Mr L.J. Hijmans van den Bergh, who did not seek reappointment to his position as a Supervisory Board member at the 2023 AGM. Their respective remuneration is pro-rated.

The current remuneration of Supervisory Board members as per the new Remuneration Policy 2024 and as approved by shareholders at the 2023 AGM, is as follows:

- Member of the Supervisory Board, including committee membership(s): € 62,700.
- Member of the Supervisory Board and Chairperson of a committee: € 66,000.
- Chairperson of the Supervisory Board: € 79,200.
- Meeting attendance fees, including conference calls: None.
- Intercontinental travel allowance: € 6,000 for physical attendance at a minimum of three meetings.

The members of the Supervisory Board are not entitled to any performance or equity related compensation and are not entitled to any pension allowance or contribution.

Proposed increase in Supervisory Board compensation

Compensation for members of Besi's Supervisory Board has not been increased for the past six years. The Committee reviewed its compensation structure in 2023 with the help of a third-party consultant and concluded that the pay levels for some roles were below the benchmark of market median rates for other reference companies in accordance with the Remuneration Policy 2024. Consequently, a proposal will be made at the 2024 AGM to increase the compensation for members of Besi's Supervisory Board.

Loans

At the end of 2023, no loans, advances or guarantees were outstanding for any members of Besi's Supervisory Board.

Remuneration Policy 2024

The key principles underlying the new Remuneration Policy 2024, which was approved at the 2023 AGM include the (i) placement of a cap on total compensation available to the member of the Board of Management in any given year, (ii) elimination of the discretionary element in share-based compensation, (iii) simplification of the remuneration structure, (iv) updating of the current remuneration reference group to better reflect Besi's improved business and financial profile and (v) establishment of a minimum level of share ownership for members of the Board of Management.

Besi will apply this Remuneration Policy 2024 as from January 1, 2024.

In accordance with this policy, the Supervisory Board, upon the recommendation of the Committee, decided to increase the 2024 base salary of the CEO from € 650,000 to € 700,000. The Committee considered a 7.7% salary increase reasonable considering comparable industry peer group metrics and other industry benchmarks.

For more information, please see the Remuneration Policy 2024, which is available on our website.

Report of the Supervisory Board

Report of the Supervisory Board

Annual Report

Besi is pleased to present its 2023 Annual Report prepared by the Board of Management. The Annual Report includes Besi's Financial Statements as prepared by the Board of Management for the financial year ended December 31, 2023. At its meeting on February 21, 2024, the Supervisory Board approved these Financial Statements. Ernst & Young Accountants LLP ("EY"), independent external auditors, duly examined the 2023 Besi Financial Statements and issued an unqualified opinion thereon.

The Supervisory Board recommends that the General Meeting of Shareholders adopts the 2023 Financial Statements as submitted by the Board of Management and approved by the Supervisory Board. The Board of Management, with the approval of the Supervisory Board, has also submitted a proposal to declare a cash dividend of € 2.15 per share for the year ended December 31, 2023.

Supervision

Besi has a two-tier board structure consisting of a Board of Management and a Supervisory Board that is responsible for supervising and guiding the Board of Management. The Board of Management is currently comprised of one member, Mr Richard Blickman. The Supervisory Board is currently comprised of five members, all of whom are considered independent within the meaning of best practice provision 2.1.8 of the Dutch Corporate Governance Code. In the opinion of the Supervisory Board, the independence requirements referred to in best practice provisions 2.1.7 to 2.1.9 (inclusive) of the Dutch Corporate Governance Code have been fulfilled.

Name	Year first appointed	Year reappointed	Term end
Mr Richard Norbruis	2023	–	2027
Mr Niek Hoek	2018	2022	2026
Mr Carlo Bozotti	2018	2022	2026
Dr Laura Oliphant	2021	–	2025
Ms Elke Eckstein	2021	–	2025

Mr Richard Norbruis was appointed as Supervisory Board member for a four-year term at Besi's Annual General Meeting of Shareholders held on April 26, 2023 ("2023 AGM"). Subsequently, Richard Norbruis was elected as Chairperson of the Supervisory Board. Mr Lodewijk Hijmans van den Bergh, former Chairperson of the Supervisory Board did not seek reappointment for another term upon the expiration of his four-year term at Besi's 2023 AGM.

Composition and diversity

The Supervisory Board considers its composition to be aligned with its objective for an adequate spread of knowledge and experience amongst its members in relation to the technological and global character of Besi's business as well as an adequate level of knowledge and experience in financial, economic, technical, social and legal aspects of international business and government and public administration. The Supervisory Board believes that it has the requisite expertise, background, competencies and independence to carry out its duties properly and that all members of the Supervisory Board have sufficient time to spend on their respective duties and responsibilities.

The Supervisory Board has a diverse composition in terms of experience, expertise, cultural or other background, competencies, education, gender identity, age and nationality. On all such points, its composition is in line with the objectives of the Supervisory Board's profile and Diversity and Inclusion policy. The current Supervisory Board male/female ratio of 60/40 is in compliance with the Supervisory Board's profile and Besi's Diversity and Inclusion policy as well as with Dutch legislation on gender diversity effective January 1, 2022. When considering new candidates, the Supervisory Board will retain an active and open attitude with respect to the selection of female candidates. Gender is, however, only one factor of diversity. The qualifications of a particular person and the requirements for the position shall in principle always prevail over all other factors and considerations when filling a vacancy, unless otherwise required by Dutch law.

Meetings and attendance

In 2023, the Supervisory Board held six meetings, of which four were combined meetings of the Supervisory Board and the Audit Committee. Four meetings were held in-person and two meetings were held virtually. The Supervisory Board also held three virtual update meetings during the year. In addition, the Supervisory Board visited Besi's locations in Switzerland, Malaysia and Singapore and met with local management.

During the year, the Audit Committee held four meetings to discuss the topics set forth below and the scope and results of EY's audit of the Financial Statements. EY attended two meetings of the Audit Committee in 2023. The Audit Committee separately met with EY once without the presence of the member of the Board of Management.

The Remuneration Committee and the Nomination Committee both met once in 2023 to discuss the topics set forth below. The member of the Board of Management was not present during the Remuneration Committee meeting.

Meeting attendance by individual Supervisory Board members was as follows:

Name	Supervisory Board	Audit Committee	Remuneration Committee	Nomination Committee
Mr Richard Norbruis, Chairperson[1]	4/4	2/2	-/-	1/1
Mr Niek Hoek	6/6	4/4	1/1	-/1
Mr Carlo Bozotti	6/6	4/4	1/1	1/1
Ms Laura Oliphant	6/6	4/4	1/1	1/1
Ms Elke Eckstein	6/6	4/4	1/1	1/1
Mr Lodewijk Hijmans van den Bergh	2/2	2/2	1/1	-/-

[1] Prior to his appointment on April 26, 2023., Mr Norbruis attended all meetings of the Supervisory Board and its Committees as an observer.

Supervisory Board meeting topics

Key topics discussed by the Supervisory Board during 2023 included:

Strategic

- Semi-annual reviews of current strategic planning initiatives and the principal risks associated therewith as well as the implementation of Besi's sustainable long-term value creation strategy.
- Besi's technology roadmap and related research and development programs.
- Potential strategic alliances and acquisitions.
- The hybrid bonding joint development agreement with Applied Materials.
- ESG related topics including a review of Besi's current policies, strategies and performance more fully discussed in our Environmental, Social and Governance Report included elsewhere in this Annual Report.
- Progress on the Corporate Sustainability Reporting Directive ("CSRD") roadmap.
- Review of Besi's strategic planning 2023-2027 with participation of third-party consulting firm.

Financial

- Besi's annual budget as well as quarterly revised estimates related thereto.
- Quarterly business reviews and a review and discussion of Besi's 2023 annual budget with the Board of Management and senior management.
- Besi's capital allocation policy including completion of the € 300 million share repurchase program in October 2023 and initiation of a new € 60 million share repurchase program effective November 1, 2023.

Operations

- The ongoing transfer of operations from Europe to Asia and reductions to Besi's cost structure.
- The general risks associated with Besi's operations.
- The progress of the Sub Micron Die Attach product group focused on wafer level assembly.
- The expansion of Besi's facilities including the completion of a new cleanroom in Singapore in support of future hybrid bonding process development.
- The opening and investment in Besi Vietnam's tooling facility.
- The establishment of a branch office in India to support customer expansion.
- The progress of Besi's development programs including new enhancements to Besi's current portfolio.
- The ongoing operational development of Besi's processes, procedures, ERP and IT systems.
- The assessment and review provided by the Board of Management of the structure and operation of Besi's internal control and risk management systems as well as any significant changes thereto.

Governance

- The functioning and performance evaluation of the Board of Management, the Supervisory Board, the Audit Committee, the Remuneration Committee and the Nomination Committee and the individual members of the Supervisory Board.
- A self-assessment conducted by the Supervisory Board (without the presence of the member of the Board of Management), facilitated by an external advisor, the results of which concluded that there is a proper mix of background and skills at the Supervisory Board level and that the Supervisory Board works well as a team with open and direct communication. The conclusion of the evaluation has been shared with the member of the Board of Management and members of the Supervisory Board.
- Succession planning and related career development programs for members of senior management and key Besi staff.
- The remuneration of the Board of Management and the Remuneration Report.
- Proposal and approval of a new Remuneration Policy 2024 at Besi's 2023 AGM.
- The compensation of the Supervisory Board.

Capital allocation policy

The Board of Management is responsible for Besi's optimal capital allocation and has adopted a policy which aims to enhance shareholder returns via dividends and share repurchases.

Due to Besi's earnings and cash flow generation in 2023, the Board of Management, with the approval of the Supervisory Board, will propose a cash dividend to shareholders equal to € 2.15 per share for 2023 for approval at Besi's Annual General Meeting of Shareholders to be held on April 25, 2024.

On July 21, 2022, Besi announced a € 300 million share repurchase program effective August 1, 2022. Under this program, a total of 4.3 million shares were repurchased from August 1, 2022 (inception) through October 27, 2023 (completion) at an average price per share of € 69.87. On October 26, 2023, Besi announced a new € 60 million share repurchase program effective November 1, 2023. The program is aimed at general capital reduction purposes and to help offset dilution related to Besi's Convertible Notes and shares issued under employee stock plans. It will be funded using Besi's available cash resources and is expected to be completed by October 2024. In 2023, a total of 2.6 million shares were repurchased under both programs at an average price of € 83.40 per share for an aggregate amount of € 213.4 million.

Supervisory Board committees

The Supervisory Board has established three committees, the Audit Committee, the Remuneration Committee and the Nomination Committee. These committees operate under terms of reference that have been approved by the Supervisory Board. Members of these committees are appointed from among the Supervisory Board members.

Audit Committee

The Audit Committee consists of all Supervisory Board members. The Chairperson is Mr Niek Hoek who is considered a financial expert. The Audit Committee fulfills its responsibilities by carrying out the activities enumerated under its terms of reference, including assistance provided to the Supervisory Board in fulfilling its oversight responsibilities in its review of:

- The effectiveness of Besi's internal control and risk management systems and the internal audit function are described under Risk Management and in the chapter Internal control and risk management under Corporate Governance in this Annual Report.
- The analysis and assessment provided by the Board of Management of the structure and operation of Besi's internal control and risk management systems and any significant changes thereto.
- Besi's capital structure, financing and treasury operations.
- Besi's European and global tax structure and transfer pricing policy, including, in particular, developments affecting fiscal Base Erosion and Profit Shifting ("BEPS").
- Auditing, accounting and financial reporting processes and critical accounting policies, new accounting pronouncements and the further development of International Financial Reporting Standards as adopted by the EU ("IFRS").
- Auditing, accounting and reporting of non-financial (ESG) reporting.
- The quality of work, reporting, expertise and independence of EY, Besi's independent external auditor on a regular basis, including, in particular, the appropriateness of the provision of non-audit services.
- The terms of EY's engagement, including the scope of the audit, the materiality thresholds to be used and the audit fee.
- The approval of non-audit/assurance services by EY.
- The receipt, retention and treatment of complaints and the anonymous submission of confidential concerns by employees involving accounting matters on the basis of Besi's Whistleblower procedure, which can be found on the Company's website: **www.besi.com**.
- Information and communication technology deployment including ongoing enhancements to Besi's global ERP system.
- Besi's cyber security profile including risks and measures available to counter the rising threat of cybercrime and cyber terrorism.

The Audit Committee terms of reference are posted on Besi's website: **www.besi.com**.

Remuneration Committee

The Remuneration Committee consists of all Supervisory Board members. The Chairperson of the Remuneration Committee is Mr Carlo Bozotti. It has the following responsibilities with respect to remuneration for which it fulfills its obligations by:

- The proposal to the Supervisory Board of the Remuneration Policies to be pursued.
- The review and proposal on an annual basis of the corporate goals and objectives related to the remuneration of the Board of Management.
- The proposal to the Supervisory Board for the remuneration of the Board of Management within the scope of the Remuneration Policy as adopted by the General Meeting of Shareholders. Such proposal shall, in any event, deal with:
  - The strategic objectives for the implementation of sustainable long-term value creation.
  - The remuneration structure.
  - The amounts of the fixed and variable remuneration components and the ratio thereof.
  - The performance criteria used.
  - The scenario analyses carried out.
  - Company-wide pay ratios.
  - The terms and conditions governing conditional share awards or share options.
  - The development of the market price of the ordinary shares.
  - The overall compliance with the requirements imposed by the Dutch Civil Code and the Dutch Corporate Governance Code.
- Overseeing Besi's equity incentive plans.
- Preparing the Remuneration Report.

The Remuneration Committee terms of reference are posted on the Company's website: **www.besi.com**.

Remuneration Report

The Remuneration Report is included in a separate section of this Annual Report.

The Nomination Committee

The Nomination Committee consists of all Supervisory Board members. The Chairperson of the Nomination Committee is Ms Elke Eckstein. It has the following responsibilities with respect to the selection and nomination of Supervisory Board members and members of the Board of Management for which it fulfills its obligations by:

- Determining selection criteria and appointment procedures for Supervisory Board members and members of the Board of Management.
- Periodically assessing the size and composition of the Supervisory Board and the Board of Management and making proposals for the composition profile of the Supervisory Board.
- Periodically assessing the functioning of individual Supervisory Board members and members of the Board of Management and providing reports to the Supervisory Board.
- Creating and updating succession plans for Supervisory Board members and members of the Board of Management.
- Making proposals for appointments and reappointments.
- Supervising the policy of the Board of Management on selection criteria and appointment procedures for senior management.

The Nomination Committee terms of reference are posted on the Company's website: **www.besi.com**.

Corporate governance

The Supervisory Board acknowledges the importance of good corporate governance, the most important elements of which are transparency, independence and accountability. It continuously reviews important corporate governance developments. Reference is made to the Corporate Governance section of this Annual Report. Deviations from the Dutch Corporate Governance Code are explained in that section.

The Supervisory Board would like to express its thanks and appreciation to all involved for their hard work and dedication to the Company in 2023. In particular, we would like to thank management and employees for their actions taken this year to help Besi achieve an excellent performance in a challenging industry environment.

The Supervisory Board
Richard Norbruis, Chairperson

February 21, 2024

Board of Management and Supervisory Board Members

Board of Management and Supervisory Board Members

Board of Management

Richard W. Blickman (male, 1954)
Dutch nationality
Appointed since 1995

Chief Executive Officer, Chairman of the Board of Management

Additional functions
Member of the Netherlands Academy of Technology and Innovation

Technology Advisory Board

Marvin D. Liao (male, 1955)
Formerly VP Operations/Advanced Packaging Technology and Service of TSMC.

Frits van Hout (male, 1960)
Formerly Executive Vice President and Chief Strategy Officer of ASML N.V.

Vincent DiCaprio (male, 1966)
Vice President at Applied Materials and Head of Business and Corporate Development for its Heterogeneous Integration and ICAPS Business Unit.

From left to right: Richard Blickman, Carlo Bozotti, Laura Oliphant, Richard Norbruis, Elke Eckstein and Niek Hoek.

Supervisory Board

Richard Norbruis (male, 1957)
Chairperson
Dutch nationality
Member since 2023
Current term 2023 – 2027

Partner at Norbruis Clement Advocaten

Additional functions
Chairman of Stichting Administratie-kantoor van gewone aandelen A Van Lanschot Kempen.

Carlo Bozotti (male, 1952)
Italian and Swiss nationality
Member since 2018
Current term 2022 – 2026

Industrial Partner of FSI, private equity firm

Additional functions
Non-executive member of the board of directors of Avnet Inc. and Nice S.p.A.

Elke Eckstein (female, 1964)
German nationality
Member since 2021
Current term 2021 – 2025

Non-executive member of the board of directors of Jenoptik, KK Wind, Saferoad, u-blox and ViaCon.

Niek Hoek (male, 1956)
Dutch nationality
Member since 2018
Current term 2022 – 2026

Managing director of Brandaris Capital Holding B.V.

Additional functions
Chairman of the Supervisory Boards of Anthony Veder Group N.V. (Netherlands Antilles) and Van Oord N.V., Chairman of the Board of Stichting Preferente Aandelen Nedap and Vice Chairman of Cabka N.V.

Laura Oliphant (female, 1963)
American nationality
Member since 2021
Current term 2021 – 2025

Managing Partner of Serendibite Partners

Additional functions
Non-executive member of the board of directors of Aehr Test Systems, NextNet Inc. and USA Triathlon.

The Supervisory Board has formed the following committees:

Audit Committee
Members: Niek Hoek (Chairperson), Carlo Bozotti, Elke Eckstein, Richard Norbruis and Laura Oliphant

Nomination Committee
Members: Elke Eckstein (Chairperson), Carlo Bozotti, Richard Norbruis, Niek Hoek and Laura Oliphant

Remuneration Committee
Members: Carlo Bozotti (Chairperson), Elke Eckstein, Richard Norbruis, Niek Hoek and Laura Oliphant

Financial Statements 2023

Consolidated Statement of Financial Position

(€ thousands)	Note	December 31, 2023	December 31, 2022
Assets			
Cash and cash equivalents	3	188,477	491,686
Deposits	4	225,000	180,000
Trade receivables	5	143,218	148,333
Inventories	6	92,505	92,117
Income tax receivable		5,956	3,554
Other receivables	7	28,899	18,099
Prepayments	8	4,237	2,909
Total current assets		**688,292**	**936,698**
Property, plant and equipment	9	37,516	33,272
Right of use assets	19	18,242	17,480
Goodwill	10	45,402	45,746
Other intangible assets	11	93,668	81,218
Deferred tax assets	29	12,217	19,563
Other non-current assets	12	1,216	1,213
Total non-current assets		**208,261**	**198,492**
Total assets		**896,553**	**1,135,190**

(€ thousands)	Note	December 31, 2023	December 31, 2022
Liabilities and equity			
Current portion of long-term debt	18	3,144	2,361
Trade payables	14	46,889	41,431
Income tax payable		16,629	21,735
Provisions	15	4,751	5,578
Lease liabilities	19	3,739	3,337
Other payables	16	37,822	42,461
Other current liabilities	17	24,259	26,988
Total current liabilities		**137,233**	**143,891**
Long-term debt	18	297,353	322,815
Lease liabilities	19	14,924	14,372
Deferred tax liabilities	29	12,959	13,303
Provisions	20, 25	11,972	11,347
Other non-current liabilities	17	699	927
Total non-current liabilities		**337,907**	**362,764**
Share capital	21	811	811
Share premium		108,144	271,350
Retained earnings		162,779	219,389
Other reserves	21	149,679	136,985
Equity attributable to owners of the Company		**421,413**	**628,535**
Total liabilities and equity		**896,553**	**1,135,190**

Consolidated Statement of Operations

(€ thousands, except share and per share data)	Note	Year ended December 31, 2023	2022
Revenue	23, 24	578,862	722,870
Cost of sales		203,074	279,797
Gross profit		**375,788**	**443,073**
Selling, general and administrative expenses		105,956	95,012
Research and development expenses		56,440	53,945
Total operating expenses		**162,396**	**148,957**
Operating income		**213,392**	**294,116**
Financial income	28	13,034	1,634
Financial expense	28	(18,737)	(20,260)
Financial income (expense), net		**(5,703)**	**(18,626)**
Income before income tax		**207,689**	**275,490**
Income tax expense	29	30,605	34,843
Net income		**177,084**	**240,647**
Total net income per share			
Basic		2.28	3.03
Diluted[1]		2.23	2.90
Weighted average number of shares used to compute income per share			
Basic	30	77,508,722	79,311,366
Diluted	30	82,800,279	85,526,157

[1] The calculation of the diluted income per share for the year 2023 and 2022 assumes the exercise of equity-settled share-based payments. The calculation also assumes the conversion of the Company's Convertible Notes due 2023, 2024, 2027 and 2029, respectively, as such conversion would have a dilutive effect.

Consolidated Statement of Comprehensive Income

(€ thousands)	Year ended December 31, 2023	2022
Net income	**177,084**	**240,647**
Other comprehensive income		
Actuarial gain (loss), net of income tax	(1,191)	4,521
Items that will not be reclassified to profit and loss	(1,191)	4,521
Currency translation differences	2,631	9,467
Unrealized hedging results, net of income tax	(331)	3,867
Items that may be reclassified subsequently to profit or loss	2,300	13,334
Other comprehensive income, net of income tax	**1,109**	**17,855**
Total comprehensive income	**178,193**	**258,502**

Consolidated Statement of Changes in Equity

(€ thousands, except for share data)	Number of ordinary shares outstanding[1]	Share capital	Share premium	Retained earnings	Other reserves (Note 21)	Total share-holders' equity
Balance at January 1, 2023	**81,146,738**	**811**	**271,350**	**219,389**	**136,985**	**628,535**
Currency translation differences	-	-	-	-	2,631	2,631
Actuarial loss	-	-	-	-	(1,191)	(1,191)
Unrealized hedging results	-	-	-	-	(331)	(331)
Other comprehensive income for the year	-	-	-	-	1,109	1,109
Net income	-	-	-	177,084	-	177,084
Total comprehensive income for the year	**-**	**-**	**-**	**177,084**	**1,109**	**178,193**
Dividend paid to owners of the Company	-	-	-	(222,109)	-	(222,109)
Convertible Notes converted into equity	-	-	31,074	-	-	31,074
Changes in legal reserve	-	-	-	(11,585)	11,585	-
Equity-settled share-based payments	-	-	19,107	-	-	19,107
Purchase of treasury shares	-	-	(213,387)	-	-	(213,387)
Balance at December 31, 2023	**81,146,738**	**811**	**108,144**	**162,779**	**149,679**	**421,413**
Balance at January 1, 2022	**78,567,842**	**786**	**251,149**	**261,211**	**106,128**	**619,274**
Currency translation differences	-	-	-	-	9,467	9,467
Actuarial gain	-	-	-	-	4,521	4,521
Unrealized hedging results	-	-	-	-	3,867	3,867
Other comprehensive income for the year	-	-	-	-	17,855	17,855
Net income	-	-	-	240,647	-	240,647
Total comprehensive income for the year	**-**	**-**	**-**	**240,647**	**17,855**	**258,502**
Dividend paid to owners of the Company	-	-	-	(269,467)	-	(269,467)
Convertible Notes converted into equity	2,578,896	25	135,151	-	-	135,176
Changes in legal reserve	-	-	-	(13,002)	13,002	-
Equity-settled share-based payments	-	-	15,259	-	-	15,259
Purchase of treasury shares	-	-	(146,781)	-	-	(146,781)
Equity component new Convertible Notes	-	-	16,572	-	-	16,572
Balance at December 31, 2022	**81,146,738**	**811**	**271,350**	**219,389**	**136,985**	**628,535**

[1] The outstanding number of ordinary shares includes 4,130,944 and 2,658,812 treasury shares at December 31, 2023 and December 31, 2022, respectively.

Consolidated Statement of Cash Flows

(€ thousands)	**Note**	**Year ended December 31, 2023**	**2022**
Cash flows from operating activities			
Income before income tax		207,689	275,490
Adjustments to reconcile income before income tax to net cash flows			
Depreciation, amortization and impairment	9, 11, 19	25,732	22,992
Share-based payment expense	25	19,107	15,259
Financial expense, net	28	5,703	18,626
Effects on changes in assets and liabilities			
Decrease (increase) in trade receivables		(707)	43,166
Increase in inventories		(13,638)	(1,991)
Increase (decrease) in trade payables		8,024	(34,090)
Changes in provisions		2,732	(777)
Changes in other working capital		(23,230)	(27,861)
		231,412	310,814
Interest received		9,567	1,182
Interest paid		(4,845)	(4,772)
Income tax paid		(27,562)	(35,353)
Net cash provided by operating activities		**208,572**	**271,871**
Cash flows from investing activities			
Capital expenditures	9, 11	(6,899)	(6,780)
Capitalized development expenditures	11	(21,121)	(21,613)
Repayment of (investments in) deposits	4	(44,927)	44,711
Net cash provided by (used in) investing activities		**(72,947)**	**16,318**
Cash flows from financing activities			
Proceeds from debts	18	-	494
Proceeds from Convertible Notes	18	-	172,176
Payments on lease liabilities	18, 19	(4,307)	(4,101)
Purchase treasury shares		(213,387)	(146,781)
Dividend paid to shareholders		(222,109)	(269,467)
Net cash used in financing activities		**(439,803)**	**(247,679)**
Net change in cash and cash equivalents		(304,178)	40,510
Effect of changes in exchange rates on cash and cash equivalents		969	(219)
Cash and cash equivalents at beginning of the period	3	491,686	451,395
Cash and cash equivalents at end of the period	3	**188,477**	**491,686**

Notes to the Consolidated Financial Statements

1. Basis of presentation

General

BE Semiconductor Industries N.V. ("Besi" or "the Company") was incorporated in the Netherlands in May 1995 as the holding company for a worldwide business engaged in the development, production, marketing and sales of back-end equipment for the semiconductor industry. BE Semiconductor Industries N.V.'s principal operations are in the Netherlands, Austria, Switzerland, Malaysia, Singapore and China. BE Semiconductor Industries N.V.'s principal executive office is located at Ratio 6, 6921 RW Duiven, the Netherlands. Statutory seat of the Company is Amsterdam; number at Chamber of Commerce is 09092395.

The Consolidated Financial Statements of BE Semiconductor Industries N.V. for the year ended December 31, 2023, were authorized for issue in accordance with a resolution of the directors on February 21, 2024. The Consolidated Financial Statements of the Company as at December 31, 2023 will be presented to the Annual General Meeting of Shareholders for their adoption on April 25, 2024.

The Consolidated Financial Statements are prepared on the basis that it will continue to operate as a going concern.

Ukraine

As a result of the conflict in Ukraine, many countries have imposed, and may continue to impose, new sanctions on specified Russian entities and individuals. The direct impact to the Company in 2023 was negligible from a revenue and sourcing perspective as Besi has no presence in Russia, Ukraine or Belarus. However, the conflict and its direct and indirect consequences have and may continue to exert a drag on the global economy through inflation via energy and commodity prices. The Company implemented price increases on its systems to help compensate for inflationary cost pressures.

Israel/Hamas

The ongoing conflict between Israel and Hamas has had no direct impact on our Company in 2023, as we do not maintain a presence in that specific region.

Statement of compliance

The Company's Consolidated Financial Statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as adopted by the European Union. They also comply with the financial reporting requirements included in section 9 of Book 2 of the Netherlands Civil Code, as far as applicable.

2. Summary of significant accounting principles

Presentation

The accompanying Consolidated Financial Statements include the accounts of BE Semiconductor Industries N.V. and its consolidated subsidiaries (collectively, "the Company"). The financial statements are presented in thousands of euro, rounded to the nearest thousand, unless stated otherwise. The accounting principles which the Company uses to prepare the Consolidated Financial Statements are based on historical cost, unless stated otherwise. Exceptions to the historical cost basis include derivative financial instruments and share-based compensation which are based on fair value. In addition, for pensions and other post-retirement benefits, actuarial present value calculations are used.

Principles of consolidation

The Consolidated Financial Statements comprise the financial statements of BE Semiconductor Industries N.V. and its subsidiaries as at December 31, 2023. Subsidiaries are entities controlled by the Company. The Company controls an entity when it is exposed to, or has right to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. 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. The financial statements of the subsidiaries are prepared for the same reporting period as the parent company, using consistent accounting policies. All intra-group balances, income and expenses and unrealized gains and losses resulting from intra-group transactions are eliminated in full. Accounting policies, as set out below, have been applied consistently for all periods presented in these Consolidated Financial Statements and by all subsidiaries.

As of December 31, 2023 and 2022, the following subsidiaries are included in the accompanying Consolidated Financial Statements:

Name	Location and country of incorporation	Percentage of ownership
BE Semiconductor Industries Holding GmbH	Radfeld, Austria	100%
BE Semiconductor Industries USA, Inc.	Chandler, Arizona, USA	100%
Besi APac Sdn. Bhd.	Shah Alam, Malaysia	100%[1]
Besi Asia Pacific Holding B.V.	Duiven, the Netherlands	n/a[3]
Besi Austria GmbH	Radfeld, Austria	100%
Besi Korea Ltd.	Seoul, South Korea	100%
Besi Leshan Co., Ltd.	Leshan, China	100%
Besi Netherlands B.V.	Duiven, the Netherlands	100%
Besi North America, Inc.	Chandler, Arizona, USA	100%
Besi Philippines, Inc.	Muntinlupa City, Philippines	100%
Besi (Shanghai) Trading Co., Ltd.	Shanghai, China	100%
Besi Singapore Pte. Ltd.	Singapore, Singapore	100%
Besi Switzerland AG	Steinhausen, Switzerland	100%
Besi (Thai) S&S Ltd.	Bangkok, Thailand	100%[1]
Besi USA, Inc.	Chandler, Arizona, USA	100%
Cong Ty Tnhh Besi Viet Nam	Ho Chi Minh City, Vietnam	100%[2]
Datacon Beteiligungs GmbH	Radfeld, Austria	100%
Esec China Financial Ltd.	Hong Kong, China	100%
Esec International B.V.	Duiven, the Netherlands	n/a[3]
Fico Hong Kong Ltd.	Hong Kong, China	100%
Fico International B.V.	Duiven, the Netherlands	100%
Meco Equipment Engineers B.V.	's-Hertogenbosch, the Netherlands	100%
Meco International B.V.	's-Hertogenbosch, the Netherlands	n/a[3]

[1] In order to comply with local corporate law, a non-controlling shareholding (less than 0.1%) is held by Company Management.
[2] Cong Ty Tnhh Besi Viet Nam was established on October 11, 2023 as fully owned entity.
[3] Besi Asia Pacific Holding B.V., Esec International B.V. and Meco International B.V. were merged into BE Semiconductor Industries N.V., effective April 5, 2023.

All intercompany profits, transactions and balances have been eliminated in the consolidation.

Foreign currency translation

The Consolidated Financial Statements are presented in euros, which is the parent company's functional and presentation currency. Each entity in the group determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency. The principal exchange rates against the euro used in preparing the Consolidated Statement of Financial Position, the Consolidated Statement of Operations and Consolidated Statement of Comprehensive Income are:

	Consolidated Statement of Financial Position		Consolidated Statement of Operations and Consolidated Statement of Comprehensive Income	
	2023	2022	2023	2022
US dollar	1.11	1.07	1.08	1.06
Swiss franc	0.93	0.98	0.97	1.01
Malaysian ringgit	5.08	4.70	4.90	4.64
Chinese renminbi	7.85	7.36	7.63	7.09

Transactions in foreign currencies are initially recorded at the functional currency rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency rate of exchange ruling at the balance sheet date. All differences are accounted for into the Consolidated Statement of Comprehensive Income. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates as at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined. Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising on the acquisition are treated as assets and liabilities of the foreign operation and translated at the closing rate. The assets and liabilities of foreign operations are translated into euros at the rate of exchange ruling at the balance sheet date and their Statement of Operations is translated at the weighted average exchange rates for the year. The exchange differences arising on the translation of assets and liabilities are recognized in other comprehensive income ("OCI"), and presented as legal currency translation adjustment in equity. On disposal of a foreign entity, the deferred cumulative amount recognized in equity relating to that particular foreign operation is recognized in the Consolidated Statement of Operations.

Offsetting
Financial assets and financial liabilities are offset and the net amount is presented in the balance sheet when the Company has a legal 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.

Changes in accounting policies
The Company has consistently applied the accounting policies to all periods presented in these Consolidated Financial Statements.

A number of new standards and amendments are effective as from January 1, 2023. They do not have a material effect on the Company's Consolidated Financial Statements. These new standards and amendments are as follows:
- IFRS 17 Insurance Contracts
- Definition of Accounting Estimates - Amendments to IAS 8
- Disclosure of Accounting Policies - Amendments to IAS 1 and IFRS Practice Statement 2
- Deferred Tax related to Assets and Liabilities arising from a Single Transaction - Amendments to IAS 12
- International Tax Reform-Pillar Two Model Rules - Amendments to IAS 12

Cash and cash equivalents
Cash and cash equivalents consist of highly liquid investments with an original maturity date at the date of acquisition of three months or less or include a notice period of three months or less. Cash and cash equivalents are measured at amortized cost. Money market funds reported under cash and cash equivalents are measured at fair value through profit and loss and are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value.

Deposits
Deposits consist of cash and cash equivalents which have been placed on deposit with an original maturity between 3 and 12 months.

Trade receivables and other receivables
Trade and other receivables are initially measured at transaction price and subsequently at amortized cost less any impairment loss. The Company applies the expected credit loss model to determine any trade receivables impairment losses. The trade receivables do not contain a significant financing component (in accordance with IFRS 15) and therefore the loss allowance is always measured as equal to lifetime expected credit losses. The Company uses a provisioning matrix to calculate the level of the provision and measures lifetime expected credit losses at percentages of amounts outstanding for current trade receivables, 30 days past due, 60 days past due, 90 days past due and over 120 days past due. The total accounts receivable impairment consists of two elements: provision if and when required based on Company estimates and additional provision as determined by the use of the provision matrix. Impairment losses and any subsequent reversals are recognized in the Consolidated Statement of Operations.

Inventories
Inventories are stated at the lower of cost (using moving weighted average costs) or net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and costs to make the sales. Cost includes net prices paid for materials purchased and all expenses to bring the inventory to its current location, charges for freight and custom duties, production labor costs and factory overhead.

Property, plant and equipment
Property, plant and equipment are stated at cost less accumulated depreciation and impairment charges. Costs include expenditures that are directly attributable to the acquisition of the asset, including financing expenses of capital investment projects under construction.

Depreciation is calculated using the straight-line method, based on the following estimated useful lives:

Category	Estimated useful life
Land	Not depreciated
Buildings	15–30 years
Leasehold improvements[1]	10–15 years
Machinery and equipment	2–10 years
Office furniture and equipment	3–10 years

[1] Leasehold improvements are depreciated over the shorter of the lease term or economic life of the asset.

Where parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items of property, plant and equipment. The residual value, if not insignificant, is reassessed annually.

The Company recognizes in the carrying amount of an item of property, plant and equipment the cost of replacing part of such an item when that cost is incurred if it is probable that the future economic benefit relating to that subsequent expenditure will flow to the Company and the cost can be measured reliably. Other costs are recognized in the Consolidated Statement of Operations as expense, as incurred.

Right of use assets

Definition of a lease
At inception of a contract, the Company assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Company uses the definition of a lease in IFRS 16.

At commencement or on modification of a contract that contains a lease component, the Company allocates the consideration in the contract to each lease component on the basis of its relative stand-alone price.

Right of use assets
The Company recognizes right of use assets at the commencement date of the lease (i.e. the date the underlying asset is available for use). Right of use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right of use assets includes the amount of lease liabilities recognized, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. The right of use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets, as follows:

Category	
Land and buildings	1–10 years
Office furniture and equipment	1–10 years

In addition, the right of use asset is periodically assessed for impairment losses, and adjusted for certain remeasurements of the lease liability.

Lease liabilities
Lease liabilities are initially measured at the present value of the lease payments that are not paid at the commencement date discounted using the Company's incremental borrowing rate.

Lease payments included in the measurement of the lease liabilities comprise the following:
- Fixed payments, including in-substance fixed payments.
- Lease payments in an optional renewal period if the Company is reasonably certain to exercise an extension option.

In calculating the present value of lease payments, the Company uses the incremental borrowing rate at the lease commencement date. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term and/or a change in the in-substance fixed lease payments. When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right of use asset, or is recorded in profit or loss if the carrying amount of the right of use asset has been reduced to zero.

Short-term leases and leases of low-value assets
The Company applies the short-term lease recognition exemption to its short-term leases of buildings, machinery and equipment (i.e. those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered of low value (i.e. below five thousand euro). Lease payments on short-term leases and leases of low-value assets are recognized as expense on a straight-line basis over the lease term.

Intangible assets
Intangible assets are valued at cost less accumulated amortization and impairment charges. All intangible assets are tested for impairment whenever there is an indication that the intangible asset may be impaired. Other intangible assets, such as goodwill and intangible assets not yet in use, are not amortized, but tested for impairment annually. In cases where the carrying value of the intangibles exceeds the recoverable amount, an impairment charge is recognized in the Consolidated Statement of Operations.

Business combinations and goodwill

Business combinations are accounted for using the acquisition method as at the acquisition date, which is the date on which control is transferred to the Company. Control is the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities. In assessing control, the Company takes into consideration potential voting rights that currently are exercisable.

The Company measures goodwill at the acquisition date as:
- The fair value of the consideration transferred; plus
- The recognized amount of any non-controlling interests in the acquiree; plus
- If the business combination is achieved in stages, the fair value of the existing equity interest in the acquiree; less
- The net recognized amount (generally fair value) of the identifiable assets acquired and liabilities assumed.

Costs related to the acquisition, other than those associated with the issue of debt or equity securities, that the Company incurs in connection with a business combination are expensed as incurred.

Any contingent consideration payable is recognized at fair value at the acquisition date. If the contingent consideration is classified as equity, it is not measured and settlement is accounted for within equity. Otherwise, subsequent changes to fair value of the contingent consideration are recognized in profit or loss.

Capitalized development expenses

Expenditures for research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, are recognized in the Consolidated Statement of Operations as an expense, as incurred. Expenditure for development activities, whereby research findings are applied to a plan or design for the production of new or substantially improved products and processes, is capitalized if (i) the product or process is technically and commercially feasible, (ii) the Company has the intention and sufficient resources to complete development, (iii) the Company has the ability to use or sell the development and (iv) the Company has the ability to reliably measure the expenditure attributable to the development during its process.

The expenditure capitalized includes the cost of materials, direct labor and other directly attributable costs. Other development expenditures are recognized in the Consolidated Statement of Operations as an expense, as incurred. Government grants to compensate for the cost of an asset are deducted from the cost of the related asset. Capitalized development expenditures are stated at cost less accumulated amortization and impairment losses.

Other identifiable intangible assets

Other intangible assets that are acquired by the Company are stated at cost (i.e. fair value of the consideration given) at the date of acquisition less accumulated amortization and impairment losses.

Amortization

Amortization is charged to the Consolidated Statement of Operations on a straight-line basis over the estimated useful lives of intangible assets unless such lives are indefinite. Amortization of capitalized development expenses and other intangible assets commence from the date they are available for use.

The estimated useful lives are as follows:

Category	Estimated useful life
Software	3–5 years
Development expenses	3–7 years

The Company does not have any other intangible assets with indefinite lives.

The amortization is recognized in the Consolidated Statement of Operations in cost of sales, selling, general and administrative expenses and research and development expenses.

Impairment of non-financial assets

The carrying amounts of the Company's non-financial assets are reviewed at each year's end balance sheet date to determine whether there is any indication of impairment. If such indication exists, the asset's recoverable amount is estimated. For goodwill and intangible assets that are not yet available for use, the recoverable amount is estimated at each balance sheet date.

An impairment loss is recognized whenever the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. Impairment losses are recognized in the Consolidated Statement of Operations. Impairment losses recognized in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to cash-generating units (group of units) and then to reduce the carrying amount of the other assets in the unit (group of units) on a pro-rata basis.

Calculation of recoverable amount
The recoverable amount of other assets is the higher of their fair value less costs of disposal and value-in-use. In assessing value-in-use, the estimated future cash flows are 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. For an asset that does not generate largely independent cash inflows, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

Reversals of impairment
An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. Impairment losses in respect of goodwill are not reversed. 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.

Other non-current assets
Funds with insurance companies for pension liability are stated at fair value.

Other current liabilities
Other current liabilities consist of notes payable to banks, trade payables and other payables and are initially measured at fair value and subsequently at amortized cost, using the effective interest method.

Financial instruments
A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial instruments

Initial recognition and measurement
Trade receivables issued are initially recognized when they are originated. All other financial assets and financial liabilities are initially recognized when the Company becomes a party to the contractual provisions of the instrument. Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the marketplace are recognized on the trade date.

On initial recognition, a financial asset is classified as measured at: amortized cost; fair value through other comprehensive income ("FVOCI") or fair value through profit and loss ("FVTPL").

Financial assets are classified and measured at amortized costs or fair value through OCI if the cash flows are solely payments of principal and interest ("SPPI"). Financial assets with cash flows that are not SPPI are classified and measured at FVTPL. On initial recognition, the Company may designate a financial asset that meets the requirements to be measured at amortized cost or at FVOCI as at FVTPL if doing so eliminates an accounting mismatch.

Financial liabilities are classified as measured at amortized cost or FVTPL. A financial liability is classified as at FVTPL if it is classified as held-for-trading, it is a derivative or it is designated as such on initial recognition.

Financial instruments are initially measured at fair value plus any directly attributable transaction costs, with the exception of trade receivables. Transaction costs for financial assets at fair value through profit and loss are recognized directly in the Consolidated Statement of Operations.

The Company's financial assets include cash and cash equivalents, deposits, trade receivables, other receivables and prepayments. The Company's financial liabilities include trade and other payables, bank overdrafts, loans and borrowings and compound financial instruments, such as Convertible Notes.

Subsequent measurement and gains and losses
Financial instruments at FVTPL: These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognized in profit or loss. Financial instruments at amortized cost: These assets are subsequently measured at amortized cost using the effective interest method. The amortized cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognized in profit or loss. Any gain or loss on derecognition is recognized in profit or loss.

Derecognition
The Company derecognizes a financial asset when the contractual rights to the cash flows from the financial asset expire, or when 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 in which the Company neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expired.

Impairment of financial assets

Impairment

The Company recognizes loss allowances for expected credit losses ("ECLs") for all financial assets measured at amortized cost and measured at FVOCI.

The Company measures loss allowances at an amount equal to lifetime ECLs, except for deposits and bank balances for which credit risk has not increased significantly since initial recognition, which are measured at 12-month ECLs. 12-month ECLs are the portion of ECLs that result from default events on a financial instrument that are possible within the 12 months after the reporting date. Life-time ECLs are the ECLs that result from all possible default events over the expected life of the financial instrument.

Loss allowances for trade receivables are always measured at equal to lifetime expected credit losses. When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Company considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Company's historical experience and informed credit assessment and including forward-looking information.

Measurement of ECLs

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the entity in accordance with the contract and the cash flows that the Company expects to receive). For trade receivables, the Company applies a simplified approach in calculating ECLs.

Credit-impaired financial assets

At each reporting date, the Company assesses whether financial assets carried at amortized cost are credit-impaired. A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Presentation of allowance for ECL in the Statement of Financial Position

Loss allowances for financial assets measured at amortized cost are deducted from the gross carrying amount of the assets.

Write-off

The gross carrying amount of a financial asset is written off when the Company has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof. The Company individually makes an assessment with respect to the timing and amount of write-off based on whether there is a reasonable expectation of recovery. The Company expects no significant recovery from the amount written off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Company's procedures for recovery of amounts due.

Derivative financial instruments and hedge accounting

In line with its hedging strategy, the Company uses derivative financial instruments to hedge its exposure to foreign currency exchange rate fluctuations relating to operational activities denominated in foreign currencies. In accordance with its treasury and risk policy, the Company does not hold or issue derivative financial instruments for trading purposes. The Company uses cash flow hedge accounting. However, derivatives that do not qualify for hedge accounting are accounted for as trading instruments.

The Company recognizes derivative financial instruments initially at fair value; attributable transaction costs are recognized in the Consolidated Statement of Operations as incurred. Subsequent to initial recognition, derivative financial instruments are measured at fair value. The gain or loss on remeasurement to fair value is recognized immediately in the Consolidated Statement of Operations in financial income (expense). Where derivatives qualify for hedge accounting, recognition of any gain or loss depends on the nature of the item being hedged.

The Company applies the cash flow hedge accounting model. In this hedging model, the effective part of a hedge transaction is reported as a component of other comprehensive income (hedging reserve), which is reclassified to earnings in the same period(s) in which the hedged forecasted transaction affects earnings. The ineffective part of the hedge is recognized directly in the Consolidated Statement of Operations in financial income (expense).

Convertible Notes

The Company has issued Convertible Notes (compound financial instruments) that can be converted to share capital at the option of the holder, the number of shares to be issued is fixed and does not vary with changes in fair value. The liability component of a compound financial instrument is recognized initially at the fair value of a similar liability that does not have an equity conversion option. The equity component is recognized initially at the difference between the fair value of the compound financial instrument as a whole and the fair value of the liability component. Any directly attributable transaction costs are allocated to the liability and equity components in proportion to their initial carrying amounts. Subsequent to initial recognition, the liability component of a compound financial instrument is measured at amortized cost using the effective interest method. The equity component of a compound financial instrument is not remeasured. Interest related to the financial liability is recognized in profit or loss. On conversion, the financial liability is reclassified to equity and no gain or loss is recognized.

Provisions

A provision is recognized in the Statement of Financial Position when the Company has a present legal or constructive obligation as a result of a past event, and it is probable that an outflow of economic benefits will be required to settle the obligation. If the effect is material, 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, where appropriate, the risks specific to the liability.

Warranties

A provision for warranties is recognized when the underlying products or services are sold. The provision is based on historical warranty data and a weighting of all possible outcomes against their associated probabilities.

Revenue recognition

Significant accounting policy revenue

Revenue is measured on the consideration specified in the contract with a customer and excludes amounts collected on behalf of third parties. The Company recognizes revenue when it transfers control over a product of service to a customer.

Nature of goods and services

The following is a description of principal activities – aggregated into a single reporting segment, the semiconductor's back-end segment – from which the Company generates its revenue.

The main portion of our revenue is derived from contractual arrangements that have multiple deliverables. The Company accounts for individual products and services separately if they are a distinct performance obligation, i.e. if a product or service is separately identifiable from other items in the arrangement and if a customer can benefit from it. The consideration is allocated between separate products and services in the arrangement based on their relative stand-alone selling prices. The relative stand-alone selling prices are determined based on the list prices for products and services that are sold separately or based on the expected costs plus a margin approach. For products and services that are not sold separately, the Company estimates relative stand-alone selling prices using the expected costs plus margin approach.

Products and services	Nature and timing of satisfaction of performance obligations and significant payment terms
Machines, conversion kits and upgrades	After successful internal buy-off, machines are shipped to customers and revenue is recognized when the customer takes control of the goods in accordance with mutually agreed shipment terms. Regular payment terms vary between 30 and 90 days after date of delivery.
Installation, start-up, paid services and training services	These services are separate performance obligations and revenue is recognized at the moment of performance of these services. Paid services revenue is recognized over the contract period. Regular payment terms vary between 30 and 90 days after date of delivery.
Spare parts	Revenue of spare parts is recognized upon transfer of control, based on the applicable shipment terms. Regular payment terms vary between 30 and 90 days after date of delivery.
Extended warranty	Extended warranty is considered a separate performance obligation. Revenue for extended warranty for a warranty term in excess of the standard warranty term is deferred and recognized over the term of the extended warranty period.

Contract assets and liabilities

Contract assets are recognized according to the Company's rights to consideration for the fulfilled but not yet invoiced performance obligations at the reported date. Contract liabilities are recognized when advanced consideration is received from a customer or when the Company has outstanding performance obligations relating to extended warranty and installation.

The Company applies the practical expedient in IFRS 15.121 and does not disclose information about the remaining performance obligations that have original expected durations of one year or less.

Segment reporting

Operating segments

The Company is engaged in one line of business, the development, manufacturing, marketing, sales and service of semiconductor assembly equipment for the global semiconductor and electronics industries. The Company identifies three operating segments. The identified operating segments are Die Attach, Packaging and Plating. The chief operating decision maker reviews each operating segment in detail and certain operational functions are allocated to these operating segments: (i) Product Marketing, (ii) Research and Development, (iii) Customer Project Management, and (iv) General Management. Shared functions (Operations, Sales & Service and Spares) and corporate functions (Finance, Legal, Human Resources and IT) do not qualify as operating segments. Hence, Besi identifies three operating segments which meet the IFRS 8 criteria.

IFRS 8 allows for operating segments to be aggregated into one single operating segment if the operating segments share similar economic characteristics. The Company deems the three operating segments to meet the aggregation criteria, as the nature of the products and services, production processes, classes of customer and methods used to distribute the products and provide services are similar. Hence the three operating segments are aggregated into a single operating segment; the development, manufacturing, marketing, sales and service of assembly equipment for the semiconductor's back-end segment. The basis for aggregation is explained directly below and as a result of the aggregation, the Company has one reportable segment. All financial segment information can be found in the Consolidated Financial Statements.

Indicators for aggregation into single operating segment

The similarity of economic characteristics can be evaluated based on future prospects. Within the semiconductor back-end segment the market information is based on TechInsights, a leading independent industry analyst, forecasts. Industry trends are captured in these forecasts and always used as a source when referring to the future developments (e.g., press releases). Demand for semiconductor devices and expenditures for the equipment required to assemble semiconductors is cyclical, depending in large part on levels of demand worldwide for computing and peripheral equipment, telecommunications devices and automotive and industrial components as well as the production capacity of global semiconductor manufacturers. All operating segments move up or down in the same response to the same positive and negative factors like general economic upturns and downturns, changes in interest rates and currency exchange rates.

The nature of products and services within the Besi group is very much the same, all captured in the semiconductor back-end industry and served by one service organization, which is designing and supporting that equipment.

Furthermore, all production processes are organized as manufacturing and assembly of projects and are mainly produced in our Asian production facilities in Malaysia China and Vietnam. This means that the production for the different operating segments share the same facilities, employees and processes. Also, similar materials are used to produce the systems.

The evaluation of the type or class of customer for products and services leads to the conclusion that the risk exposure profile of the customers is similar because of the fact that all customers are leading US, European and Asian semiconductor manufacturers and assembly subcontractors which in their turn depend on the global market conditions.

One worldwide responsible person for Sales & Customer Support, indicates the centralization of the sales organization and the method used to distribute our products. The Besi name is used throughout the global operations and the Besi logo has been adopted to be used for all Besi products.

Furthermore, in order to assess performance and to make resource allocation decisions based on sufficient detailed information, the chief operating decision maker must have financial information which covers all of the operating segments, including corporate functions, meaning full Consolidated Financial Statements. For example, the total external financing of the Besi group is evaluated on consolidated level and not split into business operations.

Accordingly, all information consolidated is the reportable segment under IFRS 8, reported in the semiconductor back-end industry.

Employee benefits

Pension plans

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.

The Company's net obligation in respect of defined benefit pension plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value, and the fair value of any plan assets is deducted. The Company determines the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the net defined benefit liability (asset).

The calculation is performed by a qualified actuary using the projected unit credit method. When the calculation results in a benefit to the Company, the recognized asset is limited to the present value of economic benefits available in the form of any future refund from the plan or reductions in future contributions paid to the plan. In order to calculate the present value of economic benefits, consideration is given to any minimum funding requirements that apply to any plan in the Company. An economic benefit is available to the Company if it is realizable during the life of the plan, or on settlement of the plan liabilities.

Remeasurements arising from defined benefit plans comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest). The Company recognizes them immediately in other comprehensive income and all other expenses related to defined benefit plans in employee benefit expenses in profit or loss. When the benefits of a plan are changed, or when a plan is curtailed, the portion of the changed benefit related to past service by employees, or the gain or loss on curtailment, is recognized immediately in profit or loss when the plan amendment or curtailment occurs.

A majority of the Company's Dutch employees participate in a pension plan operated by an industry-wide pension fund, which classifies as a defined contribution plan under IAS 19.

Share-based payments

In 2019, the Company adopted the Remuneration Policy 2020-2023 which is mainly a prolongation of the Remuneration Policy 2017-2019 which contains specific conditions for the performance shares awarded to the Board of Management. The Company established the BE Semiconductor Industries N.V. Long-Term Incentive plan for the Board of Management and other employees (the "2020 Framework Incentive Plan"). For more details, reference is made to Note 25.

The grant date fair value of the performance shares granted to the Board of Management and key employees is measured taking into account the impact of any market performance conditions and non-vesting conditions, but excludes the impact of any service and non-market performance conditions.

The grant date fair value of the equity-settled share-based payment awards is recognized as an employee expense, with a corresponding increase in equity, over the period between the grant date and the vesting date of the awards. The amount recognized as an expense is adjusted to reflect the number of awards for which the related service condition and any non-market performance conditions are expected to be met, such that the amount ultimately recognized as an expense is based on the number of awards that meet the related service and non-market performance conditions at the vesting date.

Subsidies and other governmental credits

Subsidies and other governmental credits to cover research and development costs relating to approved projects are recorded as research and development credits in the period when the research and development costs to which such subsidy or credit relates occurs. If the related development costs are capitalized, the subsidies and other governmental credits will be offset against capitalization.

Net financing expenses and borrowing costs

Net financing costs comprise interest payable on borrowings calculated using the effective interest rate method, foreign exchange gains and losses and the net cost of hedging. Interest income is recognized in the Consolidated Statement of Operations as it accrues, using the effective interest method. The interest expense component of lease payments is recognized in the Consolidated Statement of Operations. Borrowing costs that are not directly attributable to the acquisition or production of a qualifying asset are recognized in the Consolidated Statement of Operations using the effective interest method.

Income taxes

The Company applies the liability method of accounting for taxes. Under the liability method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry forwards. Deferred tax assets and liabilities are measured using substantively enactment tax rates expected to apply to taxable income in the years which these temporary differences are expected to be recovered or settled.

The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the Consolidated Statement of Operations or directly in equity in the period that includes the enactment date, depending on how the deferred tax assets and liabilities were initially recognized. A deferred tax asset is recognized only to the extent that it is probable that future taxable profits will be available against which the asset can be utilized. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

Significant accounting judgements, estimates and assumptions

The preparation of the Company's Consolidated Financial Statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the disclosure of contingent liabilities, at the reporting date. However, uncertainty about these assumptions and estimates could result in outcomes that could require a material adjustment to the carrying amount of the asset or liability affected in the future.

Judgements

In the process of applying the Company's accounting policies, management has made the following judgements, apart from those involving estimates, that have the most significant effect on the amounts recognized in the Consolidated Financial Statements.

Impairment of non-financial assets

The Company assesses whether there are any indicators of impairment for all non-financial assets at each reporting date. Goodwill and other indefinite life intangibles are tested for impairment annually and at other times when such indicators exist. Other non-financial assets are tested for impairment when there are indicators that the carrying amounts may not be recoverable. When value-in-use calculations are undertaken, management must estimate the expected future cash flows from the asset or cash-generating unit and determine a suitable discount rate in order to calculate the present value of those cash flows. Further details are contained in Notes 9, 10 and 11.

Deferred tax assets

Deferred tax assets are recognized for all unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Significant management judgement is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and level of future taxable profits together with future tax planning strategies. Further details are contained in Note 29.

Pension and other post-employment benefits

The costs of defined benefit pension plans and other post-employment benefits are determined using actuarial valuations. The actuarial valuation involves making assumptions about discount rates, future salary increases, mortality rates and future pension increases. Due to the long-term nature of these plans, such estimates are subject to significant uncertainty. Further details are given in Note 25.

Development costs

Development costs are capitalized in accordance with the accounting policy as reflected before. Initial capitalization of costs is based on management judgement that technological and economic feasibility is confirmed, usually when a product development project has reached a defined milestone according to an established project management model. In determining the amounts to be capitalized, management makes assumptions regarding the expected future cash generation of the assets, discount rates to be applied and the expected period of benefits. Further details are contained in Note 11.

Inventory obsolescence

Provisions for obsolete inventories are recognized for inventories which are deemed obsolete. Significant management judgement is required to determine the amount which is considered obsolete. Further details are contained in Note 6.

Lease contracts with renewal options

The Company determines the lease term as the non-cancellable term of the lease, together with any periods covered by an option to extend the lease if it is reasonably certain to be exercised. The Company has the option, under some of its leases to lease the assets for additional terms of one to five years. The Company applies judgement in evaluating whether it is reasonably certain to exercise the option to renew. It considers all relevant factors that create an economic incentive for it to exercise the renewal. After the commencement date, the Company reassesses the lease term if there is a significant event or change in circumstances that is within its control and affects its ability to exercise (or not to exercise) the option to renew.

New IFRS standards and interpretations

A number of new standards, amendments to standards and interpretations are effective for annual periods beginning on or after January 1, 2024. However, the Company expects no material impact on the Consolidated Financial Statements.

3. Cash and cash equivalents

(€ thousands)	December 31, 2023	December 31, 2022
Cash at banks	33,966	78,496
Deposits	43,095	268,073
Money market funds and reverse repos	111,416	145,117
Total cash and cash equivalents	**188,477**	**491,686**

Interest rates on cash at banks are variable. At December 31, 2023 and 2022, no amount in cash and cash equivalents was restricted. Short-term deposits have a maturity or notice period between one and three months and carry interest at the respective short-term deposit rates. Deposits with initial maturities exceeding three months are reported under deposits.

The money market funds as of December 31, 2023 were readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. The reverse repos have a maturity period less than three months.

4. Deposits

At December 31, 2023 and 2022, an amount of € 225.0 million and € 180.0 million, respectively, was placed on deposit for various periods and with initial maturity exceeding three months. The expected credit loss on deposits is considered immaterial.

5. Trade receivables

Trade receivables, generally with payment terms of 30 to 90 days, with expected credit losses amounting to € 472 and € 855 at December 31, 2023 and 2022, respectively, are as follows:

(€ thousands)	December 31, 2023	December 31, 2022
Trade receivables	143,690	149,188
Allowance for expected credit losses	(472)	(855)
Total trade receivables, net	**143,218**	**148,333**

All trade accounts receivables have an estimated maturity shorter than one year. The carrying values of the recorded receivables are a reasonable approximation of their respective fair values, given the short maturities of the positions and the fact that allowances for expected credit losses have been recognized. Reference is made to Note 31 for additional information on ageing of trade receivables.

The movements in the allowance for expected credit losses are as follows:

(€ thousands)	2023	2022
Balance at January 1	855	856
Additions	8	2
Usage	(368)	(3)
Foreign currency translation	(23)	-
Balance at December 31	**472**	**855**

6. Inventories

Inventories consist of the following:

(€ thousands)	December 31, 2023	December 31, 2022
Raw materials	32,025	30,306
Work in progress	54,368	59,967
Finished goods	6,112	1,844
Total inventories, net	**92,505**	**92,117**

In 2023, raw materials and changes in work in progress and finished goods included in cost of sales amounted to € 152.8 million (2022: € 225.2 million).

The movements in the provision for obsolescence are as follows:

(€ thousands)	2023	2022
Balance at January 1	15,430	14,674
Additions	2,584	1,540
Usage	(601)	(923)
Foreign currency translation	(752)	139
Balance at December 31	**16,661**	**15,430**

7. Other receivables

Other receivables consist of the following:

(€ thousands)	December 31, 2023	December 31, 2022
Research and development grants	12,496	8,110
Forward foreign currency exchange contracts	9,467	6,803
VAT receivables	3,348	2,051
Interest to be received	2,627	369
Revenue to be invoiced	493	416
Other	468	350
Total other receivables	**28,899**	**18,099**

Other receivables do not include any amounts with expected remaining terms of more than one year. Reference is made to Note 31 for additional information with respect to forward foreign currency exchange contracts.

8. Prepayments

Prepayments consist of the following:

(€ thousands)	December 31, 2023	December 31, 2022
Prepaid licenses	2,082	1,463
Prepaid suppliers	1,260	364
Prepaid insurances	291	289
Prepaid pensions and social security	22	21
Other prepayments	582	772
Total prepayments	**4,237**	**2,909**

Prepayments do not include any amounts with expected remaining terms of more than one year. Other prepayments consist of prepaid registration and listing fees, prepaid exhibitions, prepaid maintenance and other prepayments.

9. Property, plant and equipment

Property, plant and equipment, net consist of the following:

(€ thousands)	Land, buildings and leasehold improvements	Machinery and equipment	Office furniture and equipment	Assets under construction	Total
Balance at January 1, 2023					
Cost	36,148	47,475	8,930	441	92,994
Accumulated depreciation and impairment	(21,023)	(31,266)	(7,433)	-	(59,722)
Property, plant and equipment, net	**15,125**	**16,209**	**1,497**	**441**	**33,272**
Changes in book value in 2023					
Capital expenditures	2,746	2,429	847	565	6,587
Transfers from inventory	-	6,406	-	-	6,406
Disposals (cost)	(179)	(482)	(270)	-	(931)
Disposals (accumulated depreciation)	154	452	269	-	875
Depreciation	(1,827)	(5,014)	(866)	-	(7,707)
Foreign currency translation	(555)	(455)	(15)	39	(986)
Total changes	**339**	**3,336**	**(35)**	**604**	**4,244**
Balance at December 31, 2023					
Cost	37,211	52,126	9,206	1,045	99,588
Accumulated depreciation and impairment	(21,747)	(32,581)	(7,744)	-	(62,072)
Property, plant and equipment, net	**15,464**	**19,545**	**1,462**	**1,045**	**37,516**

(€ thousands)	**Land, buildings and leasehold improvements**	**Machinery and equipment**	**Office furniture and equipment**	**Assets under construction**	**Total**
Balance at January 1, 2022					
Cost	32,678	45,856	10,240	415	89,189
Accumulated depreciation and impairment	(18,550)	(31,932)	(8,823)	-	(59,305)
Property, plant and equipment, net	**14,128**	**13,924**	**1,417**	**415**	**29,884**
Changes in book value in 2022					
Capital expenditures	2,591	3,045	870	37	6,543
Transfers from inventory	-	3,575	-	-	3,575
Disposals (cost)	191	(3,098)	(2,292)	-	(5,199)
Disposals (accumulated depreciation)	(178)	3,065	2,284	-	5,171
Depreciation	(1,571)	(4,324)	(795)	-	(6,690)
Impairment	-	-	-	-	-
Foreign currency translation	(36)	22	13	(11)	(12)
Total changes	**997**	**2,285**	**80**	**26**	**3,388**
Balance at December 31, 2022					
Cost	36,148	47,475	8,930	441	92,994
Accumulated depreciation and impairment	(21,023)	(31,266)	(7,433)	-	(59,722)
Property, plant and equipment, net	**15,125**	**16,209**	**1,497**	**441**	**33,272**

Depreciation and impairment

The depreciation and impairment is recognized in the following line items in the Consolidated Statement of Operations:

(€ thousands)	**Year ended December 31,**	
	2023	**2022**
Cost of sales	1,491	1,609
Selling, general and administrative expenses	5,198	4,427
Research and development expenses	1,018	654
Total depreciation and impairment	**7,707**	**6,690**

10. Goodwill

Goodwill, net consists of the following:

(€ thousands)	2023	2022
Balance at January 1		
Cost	65,946	65,370
Accumulated impairment	(20,200)	(20,200)
Goodwill, net	**45,746**	**45,170**
Changes in book value		
Foreign currency translation	(344)	576
Total changes	**(344)**	**576**
Balance at December 31		
Cost	65,602	65,946
Accumulated impairment	(20,200)	(20,200)
Goodwill, net	**45,402**	**45,746**

Impairment tests for cash-generating units containing goodwill

The Company annually carries out impairment tests on capitalized goodwill, based on the cash-generating units.

The aggregate carrying amounts of goodwill with indefinite lives allocated to each cash-generating unit are as follows:

(€ thousands)	December 31, 2023	December 31, 2022
Die Attach	43,421	43,765
Plating	1,981	1,981
Total	**45,402**	**45,746**

The value-in-use of the cash-generating units subject to impairment testing is calculated based on the discounted cash flow method. The value-in-use calculations use discounted cash flow projections based on the budget for the year 2024 and financial projections per cash-generating unit approved by management for the projection period (2025-2028).

The key assumptions used by management underlying the value-in-use calculation per cash-generating unit are as follows.

Cash flows per cash-generating unit for the five-year projection period are based on:

- The Company's budget for 2024.
- Revenue forecasts for 2025-2028 as per market growth estimates from TechInsights, a leading independent analyst for the semiconductor and semiconductor equipment industries, and the Company's estimated market shares.
- Bottom-up estimates for gross profit, research and development and selling, general and administrative expenses as per management's strategic planning.
- A pre-tax discount rate of 11.8% (Die Attach) and 11.8% (Plating) representing the pre-tax weighted average cost of capital is determined using the Capital Asset Pricing Model (in 2022 a pre-tax discount rate of 11.6% (Die Attach) and 13.2% (Plating)).
- Residual value is based on a 1.0% perpetual growth rate (in 2022: 1.0%).
- The risk free rate of 3.1% (in 2022: 2.3%) and equity risk premium of 5.0% (in 2022: 6.0%).

All assumptions used reflect the current market assessment and are based on published indices and management estimates which are challenged by a third party financial advisor. Based on this analysis, management believes that the value-in-use of the cash-generating units subject to impairment testing substantially exceeded their carrying values and that therefore, goodwill was not impaired as of December 31, 2023.

The outcome of a sensitivity analysis was that possible adverse changes in key assumptions of 100 basis points (lower revenue growth rates and higher discount rates, respectively) would not result in other conclusions for the impairment test performed.

11. Other intangible assets

Other intangible assets, net consist of the following:

(€ thousands)	Software	Development expenses	Total
Balance at January 1, 2023			
Cost	10,539	105,178	115,717
Accumulated amortization	(10,165)	(24,334)	(34,499)
Other intangible assets, net	**374**	**80,844**	**81,218**
Changes in book value in 2023			
Capitalized development expenses	-	21,121	21,121
Capital expenditures	312	-	312
Disposals (cost)	-	(13,896)	(13,896)
Disposals (accumulated depreciation)	-	13,896	13,896
Amortization	(310)	(13,635)	(13,945)
Foreign currency translation	27	4,935	4,962
Total changes	**29**	**12,421**	**12,450**
Balance at December 31, 2023			
Cost	10,878	122,724	133,602
Accumulated amortization	(10,475)	(29,459)	(39,934)
Other intangible assets, net	**403**	**93,265**	**93,668**

(€ thousands)	Software	Development expenses	Total
Balance at January 1, 2022			
Cost	13,374	87,361	100,735
Accumulated amortization	(12,573)	(19,416)	(31,989)
Other intangible assets, net	**801**	**67,945**	**68,746**
Changes in book value in 2022			
Capitalized development expenses	-	21,613	21,613
Capital expenditures	237	-	237
Disposals (cost)	(1,874)	(7,572)	(9,446)
Disposals (accumulated depreciation)	1,755	7,572	9,327
Amortization	(546)	(11,723)	(12,269)
Foreign currency translation	1	3,009	3,010
Total changes	**(427)**	**12,899**	**12,472**
Balance at December 31, 2022			
Cost	10,539	105,178	115,717
Accumulated amortization	(10,165)	(24,334)	(34,499)
Other intangible assets, net	**374**	**80,844**	**81,218**

At December 31, 2023 an amount of € 49.7 million (2022: € 44.2 million) relates to capitalized development expenses not available for use, which have been tested for impairment based on the key assumptions as outlined in Note 10. The impairment tests did not indicate any required impairment of capitalized development expenses. The outcome of a sensitivity analysis was that possible adverse changes in key assumptions (10% lower revenue and 100 basis points higher discount rates) would not result in other conclusions for the impairment tests performed.

The disposals of software and development expenses relate to intangible assets that have been fully amortized.

Amortization

The amortization charge is recognized in the following line items in the Consolidated Statement of Operations:

(€ thousands)	Year ended December 31, 2023	2022
Cost of sales	11	11
Selling, general and administrative expenses	181	451
Research and development expenses	13,753	11,807
Total amortization	**13,945**	**12,269**

12. Other non-current assets

Other non-current assets consist of the following:

(€ thousands)	December 31, 2023	December 31, 2022
Marketable securities for pension liability	549	522
Guarantee deposits	667	691
Total other non-current assets	**1,216**	**1,213**

Reference is made to Note 25 for more details.

13. Borrowing facilities

At December 31, 2023, Besi and its subsidiaries had available lines of credit aggregating € 97.7 million (2022: € 98.0 million), under which € 1.1 million (2022: € 1.1 million) was utilized related to bank guarantees. In general, interest is charged at the banks' base lending rates or ESTR/SOFR plus an increment. There were no defaults at December 31, 2023.

A summary of Besi's principal credit lines is as follows:
- A € 80 million committed revolving credit facility ("the Facility") with a consortium of European banks, which matures in 2026. Outstanding amounts under the Facility will bear interest at ESTR/SOFR plus a margin that depends on the Company's financial position. The agreement can be increased to € 136 million. Borrowings under the Facility can be repaid at any time at 100% of principal amount and can be used for working capital and other corporate purposes. The principal covenants associated with the Facility include a maintenance test of consolidated debt to equity and a limitation on the incurrence of additional permitted indebtedness. The Facility is granted without securities.
- An uncommitted overdraft facility of € 10.0 million for the purpose of short-term overdrafts (maximum of 15 days) in current accounts. The facility has no contractual maturity date.
- A credit line of € 1.0 million for bank guarantees is granted without securities. The borrowing facility has no contractual maturity date.
- A credit line of € 0.5 million related to Besi APac Sdn. Bhd. for bank guarantees is granted without securities, however, with the requirement that BE Semiconductor Industries N.V. holds, directly or indirectly, an interest of at least 51%. The borrowing facility has no contractual maturity date.
- A credit line of € 3.4 million related to Besi Singapore Pte. Ltd. for bank guarantees is granted without securities, however, with the requirement that BE Semiconductor Industries N.V. holds, directly or indirectly, an interest of at least 51%. The credit facility is secured by a parent company guarantee. The borrowing facility has no contractual maturity date.
- A credit line of € 2.8 million related to Besi Leshan Co., Ltd. is granted without securities, however, with the requirement that BE Semiconductor Industries N.V. holds, directly or indirectly, an interest of at least 51%. The credit facility is secured by a guarantee of BE Semiconductor Industries N.V. The borrowing facility has no contractual maturity date.

14. Trade payables

Trade payables are non-interest bearing and are normally settled on 30-90 day terms.

15. Provisions

Warranty provision

A summary of activity in the warranty provision is as follows:

(€ thousands)	2023	2022
Balance at January 1	5,578	6,641
Additions	6,016	6,409
Usage	(5,894)	(6,467)
Releases	(1,175)	(1,170)
Foreign currency translation	226	165
Balance at December 31	**4,751**	**5,578**

A provision for warranty is recognized when the underlying products or services are sold and presented in selling, general and administrative expenses. The provision is based on historical warranty data and a weighting of all possible outcomes against their associated probabilities. The warranty provision encompasses the standard warranty provided to customers only. The provision at December 31, 2023 is expected to be fully utilized during 2024.

16. Other payables

(€ thousands)	December 31, 2023	December 31, 2022
Payroll accruals	19,716	16,561
Volume rebate and commissions	5,758	10,042
Project costs	3,589	4,237
Audit and consultancy fees	1,940	1,610
Invoices to be received	1,746	1,419
Interest expenses	1,370	1,352
Temporaries	991	691
Forward foreign currency exchange contracts	443	98
Freight and packaging costs	383	488
Other payables	1,886	5,963
Total other payables	**37,822**	**42,461**

Other payables are non-interest bearing and have an average term of three months. Interest payable is normally settled quarterly throughout the year with the exception of the Convertible Notes on which interest is settled semi-annually. Reference is made to Note 31 for additional information with respect to forward foreign currency exchange contracts.

17. Other current liabilities

(€ thousands)	December 31, 2023	December 31, 2022
Contract liabilities	12,168	14,825
Advances from customers	8,175	7,227
Payroll liabilities	4,258	4,163
Other	357	1,700
Total other liabilities	**24,958**	**27,915**
Contract liabilities non-current portion	(699)	(927)
Total other current liabilities	**24,259**	**26,988**

Other current liabilities are non-interest bearing and are not expected to be settled in cash.

18. Long-term debt

(€ thousands)	December 31, 2023	December 31, 2022
Long-term debt		
Convertible Notes	298,455	323,134
Research and development loan from Österreichische Forschungsförderungsgesellschaft mbH, Wien, Austria (interest rate at 0.75% at December 31, 2023)	2,042	2,042
Total	**300,497**	**325,176**
Less: current portion	(3,144)	(2,361)
Total long-term debt	**297,353**	**322,815**

Aggregate required principal payments due on long-term debt, assuming no further conversion of the Convertible Notes for the next years are as follows:

(€ thousands)	Long-term debt
2024	3,200
2025	2,042
2027	150,000
2029	175,000
Total	**330,242**
Less: current portion of long-term debt	(3,200)
Non-current portion of long-term debt (principal value)	**327,042**

The Company and its subsidiaries had no defaults for its long-term debt at December 31, 2023.

Convertible Notes

In December 2016, the Company issued € 125 million principal amount of Convertible Notes with a maturity date of December 2, 2023 (the "2016 Convertible Notes"). The 2016 Convertible Notes carry a nominal interest rate of 2.5% per year, payable semi-annually.

In 2023, the remaining € 2.4 million principal amount of the 2016 Convertible Notes were converted into 129,929 ordinary shares at request of Bondholders. The carrying value of the liability at conversion amounted to € 2.4 million and was reclassified to equity and no gain or loss was recognized on conversion.

The amount of the 2016 Convertible Notes classified as equity of € 11,310 is net of attributable debt issuance cost of € 215.

In November 2017, the Company issued € 175 million principal amount of Convertible Notes with a maturity date of December 6, 2024 (the "2017 Convertible Notes"). The 2017 Convertible Notes carry a nominal interest rate of 0.5% per year, payable semi-annually. Bondholders can convert the bonds into ordinary shares at a conversion price of € 45.75 (subject to adjustments). The original exercise price of € 99.74 has been adjusted for the two-for-one stock split effective May 4, 2018 and dividends paid subsequent to the date of issuance of the 2017 Convertible Notes in accordance with the terms and conditions related thereto. The 2017 Convertible Notes will be repaid at maturity at a price of 100% of their principal amount plus accrued and unpaid interest. If not converted, at any time from December 27, 2021, the Company may redeem the outstanding 2017 Convertible Notes at their principal amount, subject to giving a minimum of 30 days' and maximum of 60 days' prior notice to Bondholders, if the value of the shares underlying the 2017 Convertible Notes equals or exceeds 130% of the then effective conversion price for at least 20 out of 30 consecutive dealing days. The 2017 Convertible Notes may be redeemed at the option of the holder in the event of a change of control, at the principal amount plus accrued interest.

In 2023, € 29.3 million principal amount of the 2017 Convertible Notes were converted into 632,516 ordinary shares at request of Bondholders. The carrying value of the liability at conversion amounted to € 28.5 million and was reclassified to equity and no gain or loss was recognized on conversion. As a result, the principal amount outstanding of the 2017 Convertible Notes declined from € 32.5 million at December 31, 2022 to € 3.2 million at December 31, 2023.

The amount of the 2017 Convertible Notes classified as equity of € 18,479 is net of attributable debt issuance cost of € 292.

In August 2020, the Company issued € 150 million principal amount of Convertible Notes with a maturity date of August 5, 2027 (the "2020 Convertible Notes"). The 2020 Convertible Notes carry a nominal interest rate of 0.75% per year, payable semi-annually. Bondholders can convert the bonds into ordinary shares at a conversion price of € 48.95 (subject to adjustments). The 2020 Convertible Notes will be repaid at maturity at a price of 100% of their principal amount plus accrued and unpaid interest. If not converted, at any time from August 26, 2024, the Company may redeem the outstanding 2020 Convertible Notes at their principal amount, subject to giving a minimum of 30 days' and maximum of 60 days' prior notice to Bondholders, if the value of the shares underlying the 2020 Convertible Notes equals or exceeds 130% of the then effective conversion price for at least 20 out of 30 consecutive dealing days. The 2020 Convertible Notes may be redeemed at the option of the holder (i) on August 5, 2025 at their principal amount plus accrued interest and (ii) in the event of a change of control, at the principal amount plus accrued interest.

The amount of the 2020 Convertible Notes classified as equity of € 16,528 is net of attributable debt issuance cost of € 251.

In April 2022, the Company issued € 175 million principal amount of Convertible Notes with a maturity date of April 6, 2029 (the "2022 Convertible Notes"). The 2022 Convertible Notes carry a nominal interest rate of 1.875% per year, payable semi-annually. Bondholders can convert the bonds into ordinary shares at a conversion price of € 115.50 (subject to adjustments). The 2022 Convertible Notes will be repaid at maturity at a price of 100% of their principal amount plus accrued and unpaid interest. If not converted, at any time from April 27, 2026, the Company may redeem the outstanding 2022 Convertible Notes at their principal amount, subject to giving a minimum of 30 days' and maximum of 60 days' prior notice to Bondholders, if the value of the shares underlying the 2022 Convertible Notes equals or exceeds 130% of the then effective conversion price for at least 20 out of 30 consecutive dealing days. The 2022 Convertible Notes may be redeemed at the option of the holder (i) on April 6, 2027 at their principal amount plus accrued interest and (ii) in the event of a change of control, at the principal amount plus accrued interest.

The amount of the 2022 Convertible Notes classified as equity of € 22,334 is net of attributable debt issuance cost of € 366.

Reconciliation of liabilities arising from financing activities

The tables below detail the changes in the Company's liabilities arising from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are those for which cash flows were, or future cash flows will be, classified in the Company's Consolidated Statement of Cash Flows as cash flows from financing activities.

(€ thousands)	January 1, 2023	Financing cash flows	Additional lease liabilities	Amortization/ accretion of interest	Conversion of Convertible Notes	Foreign currency translation	December 31, 2023
Convertible Notes	323,134	-	-	6,173	(30,852)	-	298,455
Government loans	2,042	-	-	-	-	-	2,042
Lease liabilities	17,709	(4,307)	4,587	423	-	251	18,663
Total	**342,885**	**(4,307)**	**4,587**	**6,596**	**(30,852)**	**251**	**319,160**

(€ thousands)	January 1, 2022	Financing cash flows	Equity component of new Convertible Notes	Additional lease liabilities	Amortization/ accretion of interest	Conversion of Convertible Notes	Foreign currency translation	December 31, 2022
Convertible Notes	300,254	172,176	(22,334)	-	6,292	(133,254)	-	323,134
Government loans	1,548	494	-	-	-	-	-	2,042
Lease liabilities	10,673	(4,101)	-	10,417	231	-	489	17,709
Total	**312,475**	**168,569**	**(22,334)**	**10,417**	**6,523**	**(133,254)**	**489**	**342,885**

19. Leases

The Company has lease contracts for various facilities and other equipment used in its operations. Leases of facilities generally have lease terms between one and ten years, while motor vehicles and other equipment generally have lease terms between one and four years. The Company's obligations under its leases are secured by the lessor's title to the leased assets. There are several lease contracts that include extension options. These options are negotiated by management to provide flexibility in managing the leased-asset portfolio and align with the Company's business needs. Management exercises significant judgement in determining whether these extension options are reasonably certain to be exercised. The Company also has certain leases of machinery and offices with lease terms of 12 months or less and leases of office equipment with low value. The Company applies the short-term lease and lease of low-value assets recognition exemptions for these leases.

Right of use assets

Right of use assets consists of the following:

(€ thousands)	Land and buildings	Office furniture and equipment	Total
Balance at January 1, 2023	16,660	820	17,480
Additions	4,313	274	4,587
Depreciation	(3,712)	(368)	(4,080)
Foreign currency translation	281	(26)	255
Balance at December 31, 2023	**17,542**	**700**	**18,242**

(€ thousands)	Land and buildings	Office furniture and equipment	Total
Balance at January 1, 2022	10,052	554	10,606
Additions	9,807	610	10,417
Depreciation	(3,683)	(350)	(4,033)
Foreign currency translation	484	6	490
Balance at December 31, 2022	**16,660**	**820**	**17,480**

The following amounts are recognized in the Consolidated Statement of Operations:

(€ thousands)	Year ended December 31, 2023	2022
Depreciation expense of right of use assets	4,080	4,033
Interest expenses on lease liabilities	423	231
Expenses related to short-term leases	154	143
Expenses related to leases of low-value assets	119	135
Total	**4,776**	**4,542**

Lease liabilities

Lease liabilities consist of the following:

(€ thousands)	December 31, 2023	December 31, 2022
Current	3,739	3,337
Non-current	14,924	14,372
Total lease liabilities	**18,663**	**17,709**

The incremental borrowing rates used to determine the lease liabilities range between 0% and 4.37%.

Principal payments due on lease liabilities for the next five years and thereafter are as follows:

(€ thousands)	Lease liabilities
2024	4,119
2025–2028	9,669
2029 and thereafter	6,610
Total payments due on lease liabilities	**20,398**
Discount	(1,735)
Lease liabilities	**18,663**

Extension options

Below schedule provides an overview of the contractually agreed extension options and the Company's assessment and accounting treatment:

(€ thousands)	Within 5 years	More than 5 years	Total
Extension option reasonably certain to be exercised - included in lease liabilities	1,340	-	1,340
Extension option not reasonably certain to be exercised - excluded from lease liabilities	1,454	1,454	2,908
Total (undiscounted)	**2,794**	**1,454**	**4,248**

20. Provisions

Provisions consist of the following:

(€ thousands)	December 31, 2023	December 31, 2022
Pension liabilities Switzerland	4,837	5,169
Pension liabilities Austria	490	454
Severance obligations Austria	3,896	3,617
Severance obligations Korea	2,049	1,873
Other provisions	700	234
Provisions	**11,972**	**11,347**

Reference is made to Note 25 for more details.

21. Equity

At December 31, 2023 and December 31, 2022, Besi's authorized share capital consisted of 160,000,000 ordinary shares, nominal value € 0.01 per share, and 160,000,000 preference shares, nominal value € 0.01 per share.

At December 31, 2023 and December 31, 2022, 77,015,794 and 78,487,926 ordinary shares were outstanding, excluding treasury shares of 4,130,944 and 2,658,812, respectively. No preference shares were outstanding at December 31, 2023 and December 31, 2022. All issued shares have been paid in full.

Changes in other reserves during 2023 and 2022 are as follows:

(€ thousands)	Accumulated other comprehensive income (loss)	Legal reserve currency translation adjustment	Legal reserve capitalized R&D expenses	Legal reserve cash flow hedging	Legal reserve subsidiaries	Total other reserves
Balance at January 1, 2023	(7,092)	54,238	80,844	4,474	4,521	136,985
Total comprehensive income (loss) for the period	(1,191)	2,631	-	(331)	-	1,109
Transfer from retained earnings	-	-	12,422	-	(837)	11,585
Balance at December 31, 2023	**(8,283)**	**56,869**	**93,266**	**4,143**	**3,684**	**149,679**
Balance at January 1, 2022	(11,613)	44,771	67,945	607	4,418	106,128
Total comprehensive income (loss) for the period	4,521	9,467	-	3,867	-	17,855
Transfer from retained earnings	-	-	12,899	-	103	13,002
Balance at December 31, 2022	**(7,092)**	**54,238**	**80,844**	**4,474**	**4,521**	**136,985**

Accumulated other comprehensive income (loss) consists of:

(€ thousands)	December 31, 2023	December 31, 2022
Actuarial gains (losses)	(9,924)	(8,633)
Deferred taxes	878	778
Other	763	763
Accumulated other comprehensive income (loss)	**(8,283)**	**(7,092)**

Dividends

Proposed for approval at the Annual General Meeting of Shareholders to be held on April 25, 2024 (not recognized as a liability as at December 31, 2023 and December 31, 2022):

(€ thousands)	December 31, 2023	December 31, 2022
€ 2.15 per ordinary share (2022: € 2.85)	**165,584**	**223,691**

The Board of Management proposes to allocate the part of the net income for the year 2023 remaining after payment of the dividend to the retained earnings. The Supervisory Board has approved this proposal.

For further notes to the Company's equity, reference is made to the Notes to the Parent Company Financial Statements.

22. Commitments and contingencies

The Company has an unconditional obligation related to the purchase of materials and equipment totaling € 97.5 million and € 143.2 million as of December 31, 2023 and 2022, respectively.

23. Revenue

Disaggregation of revenue

The following table disaggregates the geographical distribution of the Company's revenue billed to customers:

(€ thousands)	Year ended December 31, 2023	2022
China	205,303	187,572
United States	50,970	59,263
Malaysia	48,658	87,437
Ireland	43,492	46,036
Korea	42,189	73,339
Taiwan	37,443	86,884
Thailand	20,844	38,724
Other Asia Pacific[1]	68,433	74,682
Other Europe[1]	47,862	43,708
Rest of the World[1]	13,668	25,225
Total revenue	**578,862**	**722,870**

[1] Countries with revenue representing more than 5% of consolidated revenue in 2023 or 2022 are separately disclosed.

The following table disaggregates the Company's revenue of the three different operating segments:

(€ thousands)	Year ended December 31, 2023	2022
Die Attach	444,601	572,373
Packaging	100,417	117,808
Plating	33,844	32,689
Total revenue	**578,862**	**722,870**

The Company's revenue is generated by shipments to leading North American, European and Asian multinational chip manufacturers, assembly subcontractors and electronics and industrial companies.

Contract balances

The following table provides information about receivables, contract liabilities and other payables from contracts with customers:

(€ thousands)	December 31, 2023	December 31, 2022
Receivables, which are included in trade receivables and other receivables	143,711	148,749
Contract liabilities	12,168	14,825
Volume rebates	5,396	9,490

Significant changes in the contract liabilities are as follows:

(€ thousands)	2023	2022
Balance at January 1	14,825	11,415
Revenue recognized that was included in the contract liability balance at the beginning of the period	(13,465)	(9,815)
Increases due to cash received, excluding amounts recognized as revenue during the period	10,327	12,720
Foreign currency translation	481	505
Balance at December 31	**12,168**	**14,825**

An amount of € 699 in the contract liabilities as per December 31, 2023 is expected to be recognized after more than one year and is presented under other non-current liabilities.

Transaction price allocated to the remaining performance obligations

The following table includes revenue expected to be recognized in the future related to performance obligations that are unsatisfied (or partly unsatisfied) at the reporting date. The Company applies the practical expedient in IFRS 15.121 and does not disclose information about the remaining performance obligations that have original expected durations of one year or less:

(€ thousands)	December 31, 2023	December 31, 2022
Within 12 months	22,853	20,732
From 12-36 months	648	492
Total	**23,501**	**21,224**

24. Segment, geographic and customer information

Geographical information

The following table summarizes revenue, non-financial assets and total assets of the Company's operations in the Netherlands, Switzerland, Austria, Singapore and Malaysia, the significant geographic areas in which the Company operates. Intra-area revenues are based on the sales prices at arm's length:

(€ thousands)	The Netherlands	Switzerland	Austria	Singapore	Malaysia	Other	Total
Year ended December 31, 2023							
Total revenue	107,016	373,145	13,430	577,751	118,962	59,142	1,249,446
Intercompany revenue	(106,216)	(373,073)	(12,347)	(1,534)	(118,838)	(58,576)	(670,584)
External revenue	**800**	**72**	**1,083**	**576,217**	**124**	**566**	**578,862**
Non-financial assets	17,723	138,946	15,816	10,051	8,350	6,942	194,828
Capital expenditures	205	152	1,875	3,284	840	543	6,899
Year ended December 31, 2022							
Total revenue	120,464	484,664	6,719	730,573	189,705	68,483	1,600,608
Intercompany revenue	(119,346)	(484,498)	(6,719)	(13,148)	(189,242)	(64,785)	(877,738)
External revenue	**1,118**	**166**	**-**	**717,425**	**463**	**3,698**	**722,870**
Non-financial assets	16,883	125,191	13,534	3,891	10,268	7,949	177,716
Capital expenditures	534	167	1,425	184	3,783	687	6,780

Major customer(s)

For the years ended December 31, 2023 and December 31, 2022, no customer represented more than 10% of the Company's revenue.

25. Employee benefits

Post-employment benefits
Employee post-employment benefit plans have been established in many countries in accordance with legal requirements, customs and local practices in the countries involved.

Pension plan parent company

Type:	Defined contribution plan.
Company obligations:	No continuing obligations other than the annual payments.
Contributions:	€ 0.2 million in 2023 and € 0.1 million in 2022.

Pension plan Dutch subsidiaries

Type:	Defined contribution plan. Industry-wide pension plan managed by *Bedrijfstakpensioenfonds Metalektro* and excedent plan for certain employees.
Company obligations:	No continuing obligations other than the annual payments.
Contributions:	€ 1.5 million in 2023 and € 1.3 million in 2022.

Pension plan Switzerland

Type:	Defined benefit plan for guaranteed pension payments. Insured with an independent insurance company.
Company obligations:	The contributions required are based on the agreement with the insurer. The Company does not hold any transferable financial instruments as plan assets.
Duration:	The weighted average duration of the plan is 15 years.
Valuation:	The pension assets related to this defined benefit plan are netted with the pension liability. The cost of providing benefits under the defined benefit plan is calculated using the project unit cost method. Remeasurements are reported in accumulated other comprehensive income (loss).
Discount rate:	The discount rate is based on the available information at December 31, 2023 and determined as follows: Swiss franc bonds with rating AA as included in the Swiss Bond Index. These bonds are used to determine a yield curve for durations up to 10 years. This yield curve is extended based on the government bond rates for longer duration.

Principal actuarial assumptions at the reporting date:

	December 31, 2023	**December 31, 2022**
Discount rate	1.50%	2.25%
Future salary increases	2.50%	2.50%
Future pension increases	0.10%	0.10%

Movement in the present value of the defined benefit obligations:

(€ thousands)	**2023**	**2022**
Liability for defined benefit obligations at January 1	43,105	50,539
Current service cost	987	1,323
Interest expense	955	132
Actuarial loss (gain) arising from changes in economic assumptions	3,408	(11,605)
Actuarial loss arising from experience	104	680
Plan participants' contribution	508	483
Plan amendments	(1,442)	-
Benefits paid through pension assets	(345)	(709)
Foreign currency translation	2,924	2,262
Liability for defined benefit obligations at December 31	**50,204**	**43,105**

Total defined benefit cost (benefit) recognized in the Consolidated Statement of Operations and Consolidated Statement of Comprehensive Income:

(€ thousands)	**Year ended December 31, 2023**	**2022**
Current service costs	987	1,323
Interest expense on benefit obligation	955	132
Interest income on plan assets	(860)	(112)
Plan amendments	(1,442)	-
Administration expenses	35	33
Defined benefit cost (benefit) recognized in net income	**(325)**	**1,376**
Remeasurement from changes in financial assumptions and experience	3,512	(10,925)
Return on plan assets (excluding amounts in net interest)	(2,693)	6,929
Defined benefit cost (benefit) recognized in comprehensive income	**494**	**(2,620)**

Movement in the fair value of plan assets:

(€ thousands)	2023	2022
Fair value of plan assets at January 1	37,936	42,030
Interest income	860	112
Return on plan assets (excluding amounts included in net interest)	2,693	(6,929)
Plan participants' contribution	508	483
Company contributions	1,105	1,054
Benefits paid through pension assets	(345)	(709)
Administration expenses	(35)	(33)
Foreign currency translation	2,645	1,928
Fair value of plan assets at December 31	**45,367**	**37,936**

The major categories of plan assets as a percentage of the fair value of total plan assets are as follows:

	December 31, 2023	December 31, 2022
Qualified insurance policies	29%	31%
Bonds	20%	19%
Real estate	20%	20%
Equities	23%	22%
Other/cash	8%	8%
Total	**100%**	**100%**

The insurance policies cover in principle the minimum funding requirements. Future contributions can be increased due to changes in the annuity factors. This is subject to decision of the Company.

Net pension liability:

(€ thousands)	December 31, 2023	December 31, 2022
Defined benefit obligations	50,204	43,105
Fair value of plan assets	(45,367)	(37,936)
Net liability	**4,837**	**5,169**

Total expected payments or contributions to the defined benefit plan for 2023 amount to € 1.2 million.

Sensitivity analysis

The calculation of the defined benefit obligations is sensitive to the assumptions as set out above. The following table summarizes how the defined benefit obligation at the end of the reporting period would have increased (decreased) as a result of a change in the respective assumptions by 0.5%.

(€ thousands)	Defined benefit obligations	
	0.5% increase	0.5% decrease
Discount rate	(3,362)	3,848
Salary increase	281	(263)

The above sensitivities are based on the average duration of the defined benefit obligations determined at the date of the last full actuarial valuation at December 31, 2023 and are applied to adjust the defined benefit obligation at the end of the reporting period of the assumptions concerned.

Pension plan Austria

Type: Voluntary defined benefit plan for guaranteed pension payments covering certain persons, as well as a defined benefit plan for severance payments in accordance with Austrian labor law. Both plans are insured with an independent insurance company.

Company obligations: The contributions required based on the agreement with the insurer. The Company does not hold any transferable financial instruments as plan assets.

Duration: The weighted average duration of the pension plan is 4 years and the plan for severance payments is 15 years.

Valuation: The pension assets related to this defined benefit plan do not qualify as plan assets and are therefore presented separately, not netted with the pension liability. The cost of providing benefits under the defined benefit plans is determined separately for each plan using the project unit cost method. Remeasurements are recognized in accumulated other comprehensive income (loss). There were no gains or losses from changes in demographic and financial assumptions for either pension or severance payment plan.

Discount rate: The discount rate was derived by reference to appropriate benchmark yields on high quality corporate bonds.

Principal actuarial assumptions at the reporting date:

	December 31, 2023	**December 31, 2022**
Discount rate	3.40%	3.90%
Future salary increases (severance payments)	3.10%	3.50%

Movements in the present value of the defined benefit and severance obligations recognized in the Consolidated Statement of Financial Position are as follows:

(€ thousands)	**Pension liabilities**	**Severance obligations**	**2023 Total**
Liability for defined benefit and severance obligations at January 1	454	3,617	4,071
Current service cost	6	149	155
Interest expense	18	132	150
Actuarial loss (gain) recognized	20	(2)	18
Benefits paid	(8)	-	(8)
Liability for defined benefit and severance obligations at December 31	**490**	**3,896**	**4,386**

(€ thousands)	**Pension liabilities**	**Severance obligations**	**2022 Total**
Liability for defined benefit and severance obligations at January 1	657	4,719	5,376
Current service cost	22	204	226
Interest expense	7	45	52
Actuarial gain recognized	(224)	(1,351)	(1,575)
Benefits paid	(8)	-	(8)
Liability for defined benefit and severance obligations at December 31	**454**	**3,617**	**4,071**

The accumulated defined benefit obligation amounts to € 4.4 million at December 31, 2023. Future expected benefit payments to (former) employees regarding pensions and leave over the next five years are considered immaterial.

A summary of the components of the defined benefit cost (benefit) recognized in the Consolidated Statement of Operations and Statement of Comprehensive Income is as follows:

(€ thousands)	**Year ended December 31, 2023**	**2022**
Current service cost	155	226
Interest expense on benefit obligation	150	52
Defined benefit cost recognized in net income	**305**	**278**
Remeasurement loss (gain) recognized	18	(1,575)
Defined benefit cost (benefit) recognized in comprehensive income	**323**	**(1,297)**

Changes in assets related to the liability for defined benefit and severance obligations recognized in the Consolidated Statement of Financial Position are as follows:

(€ thousands)	**2023**	**2022**
Fair value of plan assets at January 1	522	607
Return on assets	27	(85)
Fair value of assets at December 31	**549**	**522**

The plan assets consisted of investment funds.

Total expected payments or contributions to the defined benefit plan for 2024 amount to € 0.2 million.

Sensitivity analysis
The calculation of the defined benefit and severance obligations is sensitive to the assumptions as set out earlier. The following table summarizes how the defined benefit and severance obligation at the end of the reporting period would have increased (decreased) as a result of a change in the respective assumptions by 0.5%.

(€ thousands)	**Defined benefit and severance obligations 0.5% increase**	**0.5% decrease**
Discount rate	(268)	292
Salary increase	258	(240)

The above sensitivities are based on the average duration of the defined benefit and severance obligations determined at the date of the last full actuarial valuation at December 31, 2023 and are applied to adjust the defined benefit and severance obligations at the end of the reporting period of the assumptions concerned.

Severance plan Korea

Type:	Defined benefit plan for severance payments in accordance with Korean law. The plan is partially covered through an independent insurance company.
Company obligations:	The current plan is unfunded and the Company is responsible for the payment of the severance payment upon the termination of the employee contract.
Duration:	The weighted average duration for severance payments is 4 years.
Valuation:	The assets related to this defined benefit plan are netted with the liability. The cost of providing benefits under the defined benefit plan is calculated using the project unit cost method. Remeasurements are reported in accumulated other comprehensive income (loss).
Discount rate:	The discount rate was derived by reference to appropriate benchmark yields on high quality corporate bonds.

Principal actuarial assumptions at the reporting date:

	December 31, 2023	**December 31, 2022**
Discount rate	4.10%	5.40%
Future salary increases	3.00%	3.63%

Movements in the present value of the severance obligations recognized in the Consolidated Statement of Financial Position are as follows:

(€ thousands)	2023	2022
Liability for severance obligations at January 1	2,050	2,278
Current service cost	162	211
Interest expense	98	56
Actuarial loss (gain) recognized	73	(291)
Benefits paid (partly through plan assets)	(33)	(206)
Foreign currency translation	(132)	2
Liability severance obligations at December 31	**2,218**	**2,050**

The accumulated defined benefit obligation amounts to € 2.2 million at December 31, 2023. Total expected benefits payable under this plan amount to € 0.4 million in 2024.

A summary of the components of the defined benefit cost recognized in the Consolidated Statement of Operations and Consolidated Statement of Comprehensive Income is as follows:

(€ thousands)	Year ended December 31, 2023	2022
Current service cost	162	211
Interest expense on severance obligation	98	56
Administration expenses	1	-
Interest income on plan assets	(9)	(4)
Defined benefit cost recognized in net income	**252**	**263**
Remeasurement loss (gain) recognized	73	(291)
Return on plan assets (excluding amounts in net interest)	6	2
Defined benefit cost recognized in comprehensive income	**331**	**(26)**

Changes in assets related to the liability for severance obligations recognized in the Consolidated Statement of Financial Position are as follows:

(€ thousands)	2023	2022
Fair value of plan assets at January 1	177	183
Interest income	9	4
Return on plan assets (excluding amounts included in net interest)	(6)	(2)
Benefits paid through pension assets	-	(8)
Administration expenses	(1)	-
Foreign currency translation	(10)	-
Fair value of plan assets at December 31	**169**	**177**

Net liability:

(€ thousands)	December 31, 2023	December 31, 2022
Severance obligations	2,218	2,050
Fair value of plan assets	(169)	(177)
Net liability	**2,049**	**1,873**

Sensitivity analysis

The calculation of the severance obligations is sensitive to the assumptions as set out earlier. The following table summarizes how the severance obligation at the end of the reporting period would have increased (decreased) as a result of a change in the respective assumptions by 0.5%.

(€ thousands)	Severance obligations 0.5% increase	0.5% decrease
Discount rate	(40)	42
Salary increase	42	(41)

The above sensitivities are based on the average duration of the severance obligations determined at the date of the last full actuarial valuation at December 31, 2023 and are applied to adjust the severance obligations at the end of the reporting period of the assumptions concerned.

Pension plan - other countries

The Company's US, Malaysian, Chinese and Singapore subsidiaries have defined contribution plans that supplement the governmental benefits provided under local legislation.

Share-based payments

Remuneration Policy

In 2019, the Company adopted the Remuneration Policy 2020-2023, which is mainly a prolongation of the Remuneration Policy 2017-2019. The total number of ordinary shares that will be awarded may not exceed 1.5% of the total number of outstanding shares at December 31 of the year prior to the year in which the award is made.

Under the Remuneration Policy 2020-2023, the Supervisory Board may, at its own discretion and upon recommendation of the Remuneration Committee, award additional shares to a member of the Board of Management as a reward for extraordinary achievements of excellent performance, up to a maximum of 120,000 shares. In January 2023, the Supervisory Board at its own discretion and upon recommendation by the Remuneration Committee, awarded the member of the Board of Management 88,020 shares, which vested on January 19, 2023.

2020 Framework Incentive Plan

The performance shares awarded to the member of the Board of Management and other employees under the 2020 Framework Incentive Plan will vest at the end of the three-year performance period, depending on the actual performance of the Company. If at target performance is achieved, 100% of the performance shares awarded will vest. The maximum number of shares that can vest amounts to 150% of the target number of performance shares conditionally awarded.

After the three-year performance period the actual number of performance shares that vests, subject to continued employment, will be determined based on:

- Net income as a percentage of revenue ("NIR") over a three-year performance period (50%).
- The Company's Total Shareholder Return ("TSR") relative to that of the TSR peer group consisting of 19 peer companies operating in the semiconductor industry (50%).

The TSR comparator group consists of the following companies:

TSR comparator group (excluding Besi)	
Aixtron SE	Kulicke & Soffa Industries, Inc.
Applied Materials, Inc.	Lam Research Corporation
ASM International N.V.	MKS Instruments, Inc.
ASML Holding N.V.	Nova Ltd.
ASM Pacific Technology Ltd.	Onto Innovation, Inc.
Axcelis Technologies, Inc.	SÜSS MicroTec SE
Cohu, Inc.	Tokyo Electron Ltd.
DISCO Corporation	Tokyo Seimitsu Co., Ltd.
Entegris, Inc.	Veeco Instruments, Inc.
FormFactor, Inc.	

Vesting is determined based on the following schedule, whereby as from the 2020 Framework Incentive Plan the straight-line vesting percentages are being applied on a pro rata basis between rank 12 and rank 3 for awards made as from 2020:

Besi TSR ranking relative to comparator group	Vesting percentage
Top 3	75%
Rank 4 - Rank 6	50% (at target)
Rank 7 - Rank 12	25%
Rank 13 - Rank 20	0%

Summary of outstanding performance shares

Following is a summary of changes in performance shares (award numbers adjusted for the two-for-one stock split):

	2023	2022
Outstanding at January 1	312,587	382,234
Performance shares granted (at target level)	112,007	74,996
Shares discretionary granted to the Board of Management	88,020	70,000
Shares discretionary granted to key employees	57,800	57,200
Performance adjustments	39,724	53,227
Performance shares settled in equity instruments (re-issued from treasury shares)	(322,088)	(306,774)
Performance shares forfeited	-	(18,296)
Outstanding at December 31	**288,050**	**312,587**

The market price of the Company's ordinary shares at the date of grant of the performance shares in 2023 and 2022 was € 81.88 and € 58.74, respectively. The market price of the Company's ordinary shares at the date of grant of the additional shares to the member of the Board of Management was € 62.82 (2022: € 74.62) and the market price at the date of grant to key employees was € 73.66 (2022: € 65.88).

The following table shows the outstanding at target number of performance shares conditionally awarded to the Board of Management and selected key employees, in accordance with the Besi 2020 Framework Incentive Plan:

Performance shares	Year of grant	Three-year performance period	Number of performance shares
	2021	2021-2023	109,943
	2022	2022-2024	71,421
	2023	2023-2025	106,686
Total			**288,050**

Fair value measurement performance shares

For the awards made in 2023, the fair value at the grant date of the 50% portion with a TSR performance condition was € 80.32 (2022: € 40.48) and has been derived using a Monte Carlo Simulation model. The significant inputs into the model were:

	2023	2022
Market price of the Company's ordinary shares (in euro)	81.81	58.74
Expected volatility	45.7%	45.7%
Expected dividend yield	3.42%	5.51%
Vesting period (in years)	3	3
Risk-free interest rate	2.49%	0.49%

For the 2023 awards, the fair value at the grant date of the 50% portion with a NIR performance condition was € 73.89 (2022: € 49.78). This fair value has been derived from the market price of the Company's ordinary shares at the grant date, adjusted based on the present value for expected dividends over the three-year vesting period.

The expenses related to share-based payment plans recognized in the Consolidated Statement of Operations are as follows:

(€ thousands)	Year ended December 31, 2023	2022
Performance shares granted and delivered to the Board of Management	5,529	5,223
Performance shares granted and delivered to key employees	4,258	3,762
Conditional performance shares Board of Management	1,548	1,327
Conditional performance shares key employees	7,772	4,947
Total expense recognized as personnel expenses	**19,107**	**15,259**

26. Related-party transactions

BE Semiconductor Industries N.V. and all its subsidiaries are consolidated and all transactions between these entities have been eliminated in these financial statements. There are no non-consolidated companies considered as related parties.

The Board of Management and the Supervisory Board are considered "Key Management Personnel" in accordance with IAS 24. The remuneration of the Board of Management and the Supervisory Board is as follows.

Remuneration of the Board of Management

The remuneration of the member of the Board of Management is determined by the Supervisory Board, all with due observance of the Remuneration Policy adopted by the General Meeting of Shareholders. The Supervisory Board is required to present any scheme providing for the remuneration of the member of the Board of Management in the form of shares or options to the General Meeting of Shareholders for adoption.

The total cash remuneration and related costs of the member of the Board of Management for the years ended December 31, 2023 and 2022, are as follows:

(€)	Year ended December 31, 2023	2022
Salaries and other short-term employee benefits[1]	1,882,529	1,732,910
Post-employment benefits[2]	-	12,430
Equity compensation benefits: Incentive Plan	1,547,777	1,326,796
Equity compensation benefits: Discretionary grant	5,529,416	5,223,400
Total	**8,959,722**	**8,295,536**

[1] Salaries include a bonus earned over the applicable year, which will be payable in the second quarter of the year thereafter. Furthermore, other benefits include expense compensation, medical insurance and social security premiums.

[2] The pension arrangements for the member of the Board of Management are defined contribution plans. The Company does not have further pension obligations beyond an annual contribution.

Remuneration of the Supervisory Board

The aggregate remuneration paid to current members of the Supervisory Board was € 345 in 2023 and € 339 in 2022. The remuneration of the Supervisory Board is determined by the General Meeting of Shareholders.

For further details for the remuneration of the Board of Management and the Supervisory Board reference is made to the Remuneration Report in this Annual Report.

Ordinary shares and performance shares held by the member of the Board of Management

The aggregate number of ordinary shares held by the current member of the Board of Management is as follows:

Ordinary number of shares	December 31, 2023	December 31, 2022
Board of Management	**1,342,098**	**1,516,837**

Performance shares	Year of grant	Three-year performance period	Number of performance shares
Board of Management	2021	2021-2023	25,143
	2022	2022-2024	13,927
	2023	2023-2025	20,604
Total			**59,674**

The performance shares awarded will vest at the end of the three-year performance period, depending on the actual performance of the Company.

27. Selected operating expenses and additional information

Personnel expenses for all employees are as follows:

(€ thousands)	Year ended December 31, 2023	2022
Wages and salaries	106,827	102,359
Social security expenses	13,487	12,140
Pension and retirement expenses defined contribution	6,131	5,888
Pension and retirement expenses defined benefit	1,389	1,724
Pension plan amendments	(1,442)	-
Share-based compensation plans	19,107	15,259
Total personnel expenses	**145,499**	**137,370**

The average number of fulltime equivalent employees during 2023 and 2022 was 1,700 and 1,686, respectively. For pension and retirement expenses, reference is made to Note 25.

The total number of fulltime equivalent employees per department is:

	December 31, 2023	December 31, 2022
Sales and Marketing	454	432
Manufacturing and Assembly	676	657
Research and Development	444	434
General and Administrative	162	152
Total number of personnel	**1,736**	**1,675**

As of December 31, 2023 and 2022, a total of 157 and 153 fulltime equivalent employees, respectively, were employed in the Netherlands.

28. Financial income and expense

The components of financial income and expense are as follows:

(€ thousands)	**Year ended December 31,** 2023	2022
Interest income	12,260	1,634
Net foreign currency gains	774	-
Subtotal financial income	**13,034**	**1,634**
Interest expense	(11,664)	(12,203)
Net cost of hedging	(7,073)	(7,559)
Net foreign currency losses	-	(498)
Subtotal financial expense	**(18,737)**	**(20,260)**
Financial income (expense), net	**(5,703)**	**(18,626)**

The increase in interest income is related to increased interest rates on the Company's cash balances outstanding.

29. Income taxes

Deferred tax assets (liabilities) consist of the following:

(€ thousands)	**December 31, 2023**	**December 31, 2022**
Deferred tax assets	12,217	19,563
Deferred tax liabilities	(12,959)	(13,303)
Total deferred tax assets (liabilities), net	**(742)**	**6,260**

The items giving rise to the deferred tax assets (liabilities), net are as follows:

(€ thousands)	**December 31, 2023**	**December 31, 2022**
Deferred tax assets (liabilities)		
Swiss tax credits	10,443	17,429
Lease liabilities	2,773	3,008
Provision for pensions	1,936	1,885
Operating losses carry forward	1,543	1,660
Inventories	1,378	1,677
Interest	-	593
Right of use assets	(2,704)	(2,962)
Convertible Notes	(6,827)	(8,417)
Intangible assets	(9,176)	(9,182)
Other items	(108)	569
Total deferred tax assets (liabilities), net	**(742)**	**6,260**

Following is a summary of changes in items giving rise to deferred tax assets (liabilities), net:

(€ thousands)	January 1, 2023	Profit and loss 2023	Other comprehensive income	Equity	Foreign currency translation	December 31, 2023
Deferred tax assets (liabilities), net						
Swiss tax credits	17,429	(7,732)	-	-	746	10,443
Lease liabilities	3,008	(236)	-	-	1	2,773
Provision for pensions	1,885	(66)	100	-	17	1,936
Operating losses carry forward	1,660	(113)	-	-	(4)	1,543
Inventories	1,677	(293)	-	-	(6)	1,378
Interest	593	(623)	-	30	-	-
Right of use assets	(2,962)	261	-	-	(3)	(2,704)
Convertible Notes	(8,417)	1,371	-	219	-	(6,827)
Intangible assets	(9,182)	14	-	-	(8)	(9,176)
Other items	569	(600)	-	-	(77)	(108)
Total	**6,260**	**(8,017)**	**100**	**249**	**666**	**(742)**

(€ thousands)	January 1, 2022	Profit and loss 2022	Other comprehensive income	Equity	Foreign currency translation	December 31, 2022
Deferred tax assets (liabilities), net						
Swiss tax credits	24,216	(7,772)	-	-	985	17,429
Lease liabilities	1,927	1,029	-	-	52	3,008
Operating losses carry forward	2,108	(447)	-	-	(1)	1,660
Provision for pensions	2,708	(17)	(825)	-	19	1,885
Inventories	1,954	(250)	-	-	(27)	1,677
Interest	390	203	-	-	-	593
Right of use assets	(1,913)	(997)	-	-	(52)	(2,962)
Convertible Notes	(5,579)	980	-	(3,818)	-	(8,417)
Intangible assets	(9,865)	683	-	-	-	(9,182)
Other items	520	350	(355)	-	54	569
Total	**16,466**	**(6,238)**	**(1,180)**	**(3,818)**	**1,030**	**6,260**

Up to and including 2019, Besi's Swiss operations had a mixed company status on Cantonal and Communal level. Effective January 1, 2020, the Federal Act on Tax Reform and AHV Financial ("Swiss Tax Reform") became effective, abolishing the current privileged corporate tax regimes. Upon transition, the Company has decided to use the current law step up method, which creates tax free reserves. These tax free reserves can be depreciated against taxable income on Cantonal and Communal level for a period of five years (years 2020 up to and including 2024) and to a maximum of 70% of the taxable income.

In 2021, Besi's Swiss operations obtained an approval for the Swiss Principal Company regime regarding its Singapore distribution activities effective from January 1, 2018. As part of the Swiss Tax Reform, effective January 1, 2020, this regime was abolished and upon transition, tax free reserves were created on Federal level, which can be depreciated against taxable income for a period of ten years in equal installments (years 2020 up to and including 2029). In 2022, the Company received an approval for application of an adjusted valuation model for the step-up potential calculation, which resulted in an increase of the tax free reserves. As such, the Company recorded € 2.6 million net additional deferred tax assets and € 0.9 million tax refunds relating to prior years.

In 2023, the Company utilized € 5.3 million of the deferred tax assets related to the tax free reserves on Cantonal, Communal and Federal level. Based on the results in 2023 and the updated projections for the Company's Swiss operations, the Company recorded an additional valuation allowance on the deferred tax asset of € 2.3 million (2022: additional valuation allowance of € 3.4 million). An amount of € 8.7 million related to the Swiss Tax Reform is not recognized, as the Company does not regard the realization of these tax credits probable within five years as per the Company's policy.

The key assumptions used by management for the projections for the Company's Swiss operations are consistent with the assumptions used for the impairment test on capitalized goodwill and are based on the Company's budget for 2024.

The Company estimates that possible adverse or positive changes in key assumptions (10% lower or higher revenue over the projection period) would result in an adjustment in the valuation of the deferred tax asset of approximately € 0.9 million.

The deferred tax assets for operating losses carry forward are related to the US and Austrian operations of the Company. In assessing the recoverability of deferred tax assets, the Company considers whether it is probable that sufficient taxable profits will be available to realize some portion or all of the deferred tax assets. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. The US carry forwards amounted to € 1.3 million as of December 31, 2023 and expire during the period of 2024 and thereafter. The net deferred tax asset related to the US carry forward amounts are expected to be fully recovered. As of December 31, 2023, an amount of € 0.5 million related to withholding taxes is not recognized, as the Company does not regard the realization of these withholding taxes probable within five years.

Under the Dutch innovation box regime, qualifying income that results from endeavors in the field of research and development, is taxed at an effective Dutch corporation tax rate of 9%. In 2019, the Company has been granted the Dutch innovation box regime, effective January 1, 2015 for the years up to and including 2022, which has been extended from January 1, 2023 up to and including 2027.

The distinction in recognized and unrecognized tax losses carry forward and tax credits is as follows:

(€ millions)		**2023**		**2022**
	Recognized	**Unrecognized**	**Recognized**	**Unrecognized**
USA	1.3	-	1.7	-
Austria	0.2	-	-	-
Total tax losses carried forward	**1.5**	**-**	**1.7**	**-**
Switzerland tax free reserves	10.4	8.7	17.4	5.8
Withholding taxes	-	0.5	-	0.4
Total	**11.9**	**9.2**	**19.1**	**6.2**

The aggregate deferred tax related to items recognized outside of profit and loss amounts to € 0.3 million.

The Dutch domestic statutory tax rate is 25.8% for the year ended December 31, 2023 (2022: 25.8%). The reconciliation between the actual income tax shown in the Consolidated Statement of Operations and the expense (benefit) that would be expected based on the application of the domestic tax rate to income before income tax is as follows:

(€ thousands)	Year ended December 31, 2023	in % of income before taxes	Year ended December 31, 2022	in % of income before taxes
Expected income tax expense based on domestic rate	53,584	25.8%	71,076	25.8%
Foreign tax rate differential	(23,563)	(11.3%)	(32,313)	(11.8%)
Recognition of Swiss tax credit	-	-	(2,553)	(0.9%)
Non-deductible expenses	3,363	1.6%	2,956	1.1%
Tax incentive	(4,176)	(2.0%)	(6,298)	(2.3%)
Tax exempt income	(1,337)	(0.6%)	(725)	(0.3%)
Valuation allowance adjustments	2,279	1.1%	3,404	1.2%
Changes in enacted tax rates	-	-	720	0.3%
Adjustments prior years	(114)	(0.1%)	(1,396)	(0.5%)
Other	569	0.2%	(28)	0.0%
Income tax expense reported	**30,605**	**14.7%**	**34,843**	**12.6%**

The difference between the effective tax rate and the statutory rate in the Netherlands is mainly due to different statutory tax rates in the countries in which Besi operates outside the Netherlands, primarily in Switzerland. The tax incentives mainly relates to the application of the innovation box regime in the Netherlands and preferential tax rate in Singapore. The adjustment of the valuation allowance of € 2.3 million in 2023 relates to the revaluation of tax credits at Besi Switzerland due to the 2023 financial performance and revised projections.

The income tax expense shown in the Consolidated Statement of Operations consists of the following:

(€ thousands)	Year ended December 31, 2023	2022
Current	22,588	28,605
Deferred	8,017	6,238
Total	**30,605**	**34,843**

There are no income tax consequences attached to the proposed payment of dividends by the Company to its shareholders.

The Company is currently not in scope of Pillar Two legislation.

Tax risk

Given the international business structure of the Company and the increasing number and amounts of intercompany transactions certain tax risks hereto may exist. Profits are allocated to countries where factual economic activities are executed in accordance with national and international rules and standards and intragroup transactions have a business rationale. Besi has controls and procedures in place, including oversight, to manage its tax risks. These risk management and governance arrangements are embedded in an Internal Besi Framework. Besi has appropriate tax knowledge in-house to deal with its tax affairs, supplementing this with external advice where appropriate. Besi monitors new and developing tax legislation, ensures appropriate training is provided to its staff, and adapts procedures and processes to comply with changes.

The Austrian Tax Authorities have finalized the tax audit over the period 2015 to 2018 and have issued a final assessment which results in an additional € 1.7 million tax payable over this period. The assessment is related to an adjustment with respect to the transfer pricing policy implemented. The Company is of the view that the transfer pricing policy historically applied is in line with the arm's length principle as set forth by the OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations and Austrian transfer pricing regulation. The assessment issued by the Austrian Tax Authorities would trigger double taxation for the Company. As such, in order to defend the Company's tax filing position in Austria and, if applicable, to avoid any remaining double taxation, a Mutual Agreement Procedure ("MAP") request has been filed with the relevant Competent Authorities. This process can extend to several years until it comes to conclusion.

As the Company has applied the same transfer pricing policy for the subsequent years, it is likely that the Austrian Tax Authorities will challenge the applied transfer pricing practice also for the subsequent years based on the assessment issued for the 2015 to 2018 tax audit period. The total potential additional tax expenses related to the period 2015 to 2023 amounts to approximately € 4.1 million being the single best estimate of the uncertainty and considers an offsetting corresponding adjustment on the Swiss taxable income.

Based on the relevant facts and circumstances, the Company has determined that it is probable that the MAP will confirm the Company's transfer pricing policy and as such determined the taxable profit consistently with the tax treatment used in its income tax filings, not reflecting these additional tax expenses associated with the uncertainty.

30. Earnings per share

The following table reconciles ordinary shares outstanding at the beginning of the year to average shares outstanding used to compute income per share.

	2023	2022
Shares outstanding at beginning of the year	78,487,926	77,969,623
Shares re-issued from treasury shares for the vesting of performance stock awards (LTI)	176,268	179,574
Shares re-issued from treasury shares for the vesting of shares discretionary granted	145,820	127,200
Shares re-issued from treasury shares for partial conversion of the 2016 and 2017 Convertible Notes	762,445	328,335
Shares issued for partial conversion of the 2017 Convertible Notes	-	2,578,896
Shares bought under the share repurchase program	(2,556,665)	(2,695,702)
Shares outstanding at end of the year	**77,015,794**	**78,487,926**
Average shares outstanding - basic	**77,508,722**	**79,311,366**
Dilutive effect of outstanding performance shares	370,874	380,590
Dilutive effect of all outstanding Convertible Notes	4,920,683	5,834,201
Average shares outstanding - diluted	**82,800,279**	**85,526,157**

Net income in 2023 used in calculating dilutive earnings per share amounts to € 185.0 million (2022: € 248.3 million) and is adjusted for the after tax effects of interest charges related to the 2016, 2017, 2020 and 2022 Convertible Notes amounting to € 7.9 million in 2023 (2022: € 7.6 million).

31. Financial instruments, financial risk management objectives and policies

Fair value of financial instruments

The Company assumes that the book value of the Company's financial instruments, which consist of cash and cash equivalents, deposits, trade receivables and accounts payable, does not significantly differ from their fair value due to the short maturity of those instruments and to the fact that interest rates are floating or approximate the rates currently available to the Company. For the valuation of the Convertible Notes reference is made to Note 18.

The Company uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

Level 1: Quoted (unadjusted) prices in active markets for identical assets or liabilities.
Level 2: Other techniques for which all inputs which have a significant effect on the recorded fair value are observable, either directly or indirectly.
Level 3: Techniques which use inputs which have a significant effect on the recorded fair value that are not based on observable market data.

The fair values of other financial assets and financial liabilities, together with the carrying amounts in the Consolidated Statements of Financial Position, are as follows:

(€ thousands)			December 31, 2023	
	Note	Carrying amount	Level	Fair value
Financial assets				
Forward foreign currency exchange contracts	7	9,467	2	9,467
Marketable securities for pension liability	12	549	1, 2	549
Total		**10,016**		**10,016**
Financial liabilities				
Forward foreign currency exchange contracts	16	443	2	443
Long-term debt[1]	18	300,497	1	661,308
Total		**300,940**		**661,751**

[1] The fair value of the Convertible Notes included in the long-term debt are based on the closing prices of the Notes on the Deutsche Börse Freiverkehr market.

(€ thousands)			December 31, 2022	
	Note	Carrying amount	Level	Fair value
Financial assets				
Forward foreign currency exchange contracts	7	6,803	2	6,803
Marketable securities for pension liability	12	522	1, 2	522
Deposits[1]	4	25,000	2	24,265
Total		**32,325**		**31,590**
Financial liabilities				
Forward foreign currency exchange contracts	16	98	2	98
Long-term debt[2]	18	325,176	1	402,036
Total		**325,274**		**402,134**

[1] Relates to a two-years deposit, maturing in December 2023. The fair value of all other deposits does not significantly differ from their book values due to their short maturity and remaining tenor.
[2] The fair value of the Convertible Notes included in the long-term debt are based on the closing prices of the Notes on the Deutsche Börse Freiverkehr market.

There were no transfers between levels during the years ended December 31, 2023 and December 31, 2022.

The only recurring fair value measurement is the valuation of forward exchange contracts for hedging purposes. According to IFRS 13 this measurement is categorized as Level 2. Non-recurring fair value measurements were not applicable in the reporting period.

Financial risk management objectives and policies

Risk management framework

The Company is exposed to a variety of financial risks, such as foreign currency risk, interest rate risk, credit risk, market risk, liquidity risk and capital risk. These risks are inherent to the way the Company operates as a multinational with a number of local operating companies.

The Company's overall risk management policy is established to identify and analyze the risks faced by the Company, to set appropriate risk limits and controls, and to monitor risks and adherence to risk limits. Risk management policies and systems are managed at central level and reviewed regularly to reflect changes in market conditions and the Company's activities.

All material findings that result from the use of the Company's risk management policy are discussed with our Audit Committee and Supervisory Board.

The Company, through its training, management standards and procedures, such as guidelines and instructions governing hedging of financial risks, developed a disciplined and constructive control environment in which all employees understand their roles and obligations. In addition, the Company performs several reviews at all significant operating companies, such as reviews of the foreign currency positions. The Company's policies, specifically regarding foreign currency hedging, interest rate, credit, market and liquidity risks, are further described in the remainder of this Note.

Foreign currency risk

Due to the international scope of the Company's operations, the Company is exposed to the risk of adverse movements in foreign currency exchange rates. These movements typically also affect economic growth, inflation, interest rates, government actions and other factors. These changes can cause the Company to adjust its financing and operating strategies. The Company is primarily exposed to fluctuations in the value of the euro, Swiss franc, Singapore dollar, Malaysian ringgit and Chinese renminbi against the US dollar and US dollar-linked currencies. Furthermore, due to the Company's ongoing transfer of the supply chain to Asia, the Company is increasingly exposed to fluctuations of the Malaysian ringgit, Chinese renminbi and Singapore dollar against the euro, Swiss franc and US dollar.

As a consequence of the global nature of Besi's businesses, its operations, reported financial results and cash flows are exposed to the risks associated with fluctuations in exchange rates between the euro and other major world currencies.

Besi's currency risk exposure primarily occurs because the Company generates a portion of its revenue in currencies other than the euro while the major share of the corresponding cost of sales is incurred in euro, Swiss franc, Malaysian ringgit and Chinese renminbi. The percentage of its consolidated net revenue which is represented in US dollar amounted to approximately 75% and 72% of total revenue for the years ended December 31, 2023 and 2022, respectively, whereas revenue denominated in euro amounted to approximately 25% in 2023. Approximately 32% of its costs and expenses were denominated in euro, 23% in Malaysian ringgit, 15% in Chinese renminbi, 8% in US dollar and the remaining 22% in various currencies. In order to mitigate the impact of currency exchange rate fluctuations, Besi continually assesses its remaining exposure to currency risks and hedges such risks through the use of derivative financial instruments.

The Company seeks to protect itself from adverse movements in foreign currency exchange rates by hedging firmly committed sales contracts, which are denominated in foreign currencies through the use of forward foreign currency exchange contracts. In addition, the Company also uses forward foreign currency exchange contracts to hedge balance sheet positions that are denominated in a foreign currency. During 2023 and 2022, the Company did not have any derivative financial instruments that were held for trading or speculative purposes. Furthermore, the Company does not use financial instruments to hedge the translation risk related to equity and intercompany loans of a permanent nature. The Company has adopted the cash flow hedge model in line with IFRS 9. In this hedging model, the effective part of a hedge transaction is reported as a component of other comprehensive income, which is reclassified to earnings in the same period(s) in which the hedged forecasted transaction affects earnings.

Due to cash flow hedge transactions, € 4,675 was reported as other comprehensive income at December 31, 2023. The amount in 2023 released from equity in revenue in the Consolidated Statement of Operations was € 9,416. The cash flow hedging reserve included in equity comprises the effective portion of the cumulative net change in the fair value of cash flow hedges related to hedged transactions that have not yet occurred. The ineffective part of the hedges recognized, directly in the Consolidated Statement of Operations was a gain of € 156 in 2023 and a loss of € 924 in 2022.

The movement of the cash flow hedging reserve is as follows:

(€ thousands)	2023	2022
Balance at January 1	4,830	639
Amount recognized in equity	(9,416)	12,635
Amount recycled in Consolidated Statement of Operations	9,417	(9,368)
Amount reclassified to Consolidated Statement of Operations due to ineffectiveness	(156)	924
Balance at December 31	**4,675**	**4,830**

The Company has exposure to credit risk to the extent that the counterparty to the transaction fails to perform according to the term of the contract. The amount of such credit risk, measured as the fair value of all forward foreign currency exchange contracts that have a positive fair value position, was € 9,467 and € 6,803 at December 31, 2023 and 2022, respectively. The Company believes that the risk of significant loss from credit risk is remote, because it deals with credit-worthy financial institutions. The Company does not, in the normal course of business, demand collateral from the counterparties.

A summary of the Company's most important forward foreign currency exchange contracts at foreign currency contract rate is set forth below:

(€ thousands)	Nominal Value	Average rate	Maturity	Fair Value, net
December 31, 2023				
To sell US dollars for Swiss francs	135,261	1.139	< 4 months	7,187
To sell US dollars for euros	47,409	1.075	< 4 months	1,167
To buy Malaysian ringgits for Swiss franc	16,316	5.436	< 1 month	(146)
To buy Malaysian ringgits for euros	14,128	5.114	< 2 months	32
To sell Malaysian ringgits for euros	28,163	5.080	< 1 month	(4)
To sell euros for Swiss francs	35,924	0.948	< 2 months	925
Other FX pair contracts	16,497		< 1 month	(137)
Total	**293,698**			**9,024**
December 31, 2022				
To sell US dollars for Swiss francs	194,637	1.064	< 4 months	4,673
To sell US dollars for euros	44,628	1.033	< 4 months	1,685
To buy Malaysian ringgits for Swiss franc	5,832	4.762	< 1 month	(16)
To sell Malaysian ringgits for euros	17,027	4.627	< 2 months	291
To sell euros for Swiss francs	23,200	0.982	< 2 months	(12)
Other FX pair contracts	30,268		< 2 months	84
Total	**315,592**			**6,705**

The contracts to sell US dollars for euros and Swiss francs predominantly apply for hedge accounting. All other forward foreign currency exchange contracts are economic hedges.

At December 31, 2023 and 2022, the unrealized gain (loss) on forward foreign currency exchange contracts that were designated as a hedge of firmly committed transactions amounted to € 9,024 and € 6,705, respectively.

The fair value of the Company's forward foreign currency exchange contracts, which are categorized as Level 2 is as follows:

(€ thousands)		2023		2022
	Positive	Negative	Positive	Negative
Forward foreign currency exchange contracts				
Fair value	**9,467**	**443**	**6,803**	**98**

The fair value of the forward foreign currency exchange contracts is included in the Company's other receivables and the other payables. The Company recorded no changes in the fair value of the financial instruments that were attributable to changes in the credit risk of the forward exchange contracts. All foreign exchange currency contracts have a maturity of less than twelve months. The cash flows related to foreign currency contracts with positive fair values and related to foreign currency contracts with negative fair values may be settled gross or net and are expected to occur as follows:

(€ thousands)	**December 31, 2023**	**December 31, 2022**
Proceeds	302,722	322,297
Payments	(293,698)	(315,592)
Net	**9,024**	**6,705**

The Company's principal financial liabilities, other than derivatives, comprise of bank loans and overdrafts, Convertible Notes, financial leases and trade payables. The main purpose of these financial liabilities is to finance the Company's operations. The Company has various financial assets such as trade receivables and cash and short-term deposits, which arise directly from its operations.

The Company enters into derivative transactions exclusively with forward currency contracts. The purpose of these transactions is to manage the currency risks arising from the Company's operations.

The Company's policy is, and has been throughout 2023 and 2022, that no trading in derivatives shall be undertaken. The main risks arising from the Company's financial instruments are foreign currency risk, interest rate risk, credit risk and liquidity risk.

The following table presents a sensitivity analysis of the Company's profit before tax (due to changes in the fair value of monetary assets and liabilities) and the Company's equity (due to changes in the fair value of forward exchange contracts) related to reasonable potential changes in the US dollar exchange rate compared to the euro, Swiss franc and Malaysian ringgit, with all other variables held constant. This comparison is done as most transactions are in US dollar and are hedged against the local currencies of the main operations in the Netherlands, Switzerland and Malaysia. The analysis includes the effects of fair value changes of the financial instruments used to hedge the currency exposures and focuses only on balance sheet positions.

The discussion below of changes in currency exchange rates does not incorporate other economic factors. For example, the sensitivity analysis does not take into account the possibility that rates can move in opposite directions and that gains from one category may or may not be offset by losses from another category. As currency exchange rates change, translation of the statements of operations of Besi's international business into euro affects year over year comparability.

(€ thousands)		**Effect on profit before tax**	**2023 Effect on equity**	**Effect on profit before tax**	**2022 Effect on equity**
Increase/decrease in US dollar rate compared to euro	+10%	-	(2,500)	-	(2,300)
	-10%	-	2,500	-	2,300
Increase/decrease in US dollar rate compared to Swiss franc	+10%	-	(8,000)	-	(12,000)
	-10%	-	8,000	-	12,000

The current outstanding forward exchange contracts have been included in this calculation.

Interest rate risk
The Company has interest-bearing assets and liabilities exposing it to fluctuations in market interest rates. The Company is hardly exposed to the risk of changes in market interest rates through borrowing activities due to very limited debt with floating interest rates. Given the Company's cash position, fluctuations in market interest rates are affecting the Company's results. An increase of interest rates will have a positive effect, while a decrease of market interest rates will negatively impact the Company's results. No derivative interest rate related swaps have been entered into for trading or speculative purposes or to manage interest exposures.

Credit risk
Credit risk is the risk that the counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Company is exposed to credit risk from its operating activities (primarily for trade receivables) and from its financing activities for cash and cash equivalents and derivative financial instruments. With its treasury and cash investment policies the Company manages exposure to credit risks on an ongoing basis including monitoring of the creditworthiness of counterparties. The Company does not anticipate on non-performance by counterparties given their high creditworthiness expressed in good credit rates.

The Company's maximum exposure to credit risk for financial instruments are the carrying amounts of financial assets as illustrated in the table at the beginning of Note 31. The Company does not hold collateral as security.

Cash and cash equivalents

The Company is managing the credit risk from balances with banks and cash equivalents in accordance with the Company's cash investment policy. In addition to preserving the principal amount main objectives of this policy are maintaining appropriate liquidity for business operations, diversifying cash investments to minimize risk from inappropriate investments and concentrating the Company's cash at the highest level, i.e. BE Semiconductor Industries N.V. Diversification is aimed by distributing the cash and cash equivalents over at least five counterparties including money market funds. Cash pool arrangements based on zero-balancing are in place to concentrate cash enabling BE Semiconductor Industries N.V. to fulfil the role of internal bank.

The Company invests cash and cash equivalents in (short-term) deposits with financial institutions that have good credit ratings and in AA and AAA money market funds that invest in highly rated short-term debt securities of governments, financial institutions and corporates. These investments are readily convertible to a known amount in cash and are subject to an insignificant risk of change in value.

Trade receivables and other receivables

The Company has established a credit policy under which credit evaluations are performed on all customers requiring credit over specified thresholds. The Company's exposure to credit risk is influenced mainly by the individual characteristics of each customer. However, management also considers the demographics of the Company's customer base, including the default risk of the industry and country in which customers operate, as these factors may have an influence on credit risk. As the Company's revenue is generated by shipments to Asian manufacturing operations of leading US, European and Asian semiconductor manufacturers and subcontractors, an industry and geographical concentration of credit risk exists, however, this risk is reduced through the long-term relationships with its customers.

Ageing of trade receivables and other receivables:

(€ thousands)	Total	Impaired	Current					Past due
				< 30 days	30–60 days	60–90 days	90–120 days	> 120 days
2023	172,117	(472)	139,536	13,018	11,174	3,765	1,675	3,421
2022	166,432	(855)	132,991	8,026	11,476	2,405	1,430	10,959

Expected credit loss assessment

The Company recognizes an allowance for expected credit losses ("ECLs"). ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Company expects to receive, discounted at an approximation of the original effective interest rate. For trade receivables, the Company applies a simplified approach in calculating ECLs. Therefore, the Company does not track changes in credit risk, but instead recognizes a loss allowance based on lifetime ECLs at each reporting date. The Company has established provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment. In addition the Company has compared the outcome based on historical losses with the credit ratings of its largest individual customers.

Based on the above, an amount of € 472 of impairment has been recognized on trade receivables and contract assets as per December 31, 2023.

Forward exchange contracts

The forward exchange contracts are with multiple counterparties that have high credit ratings. Currently, the Company does not expect any counterparty to fail to meet its obligations.

Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices, will affect the Company's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return. The Company buys and sells derivatives, and also incurs financial liabilities, in order to manage market risks. All such transactions are carried out within the guidelines set by the Company.

Liquidity risk

Liquidity risk is the risk that the Company will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Company's liquidity needs are affected by many factors including uncertainties of the global economy and the semiconductor industry resulting in fluctuating cash requirements. The Company believes that it will have sufficient liquidity to meet its current liabilities including expected capital expenditures and repayment obligations in 2023. The Company monitors its risk to a shortage of funds by reviewing cash flows of all entities throughout the year. The Company intends to return cash to the shareholders on a regular basis in the form of dividend payments and, subject to actual and anticipated liquidity requirements and other relevant factors, share buybacks.

The table below summarizes the maturity profile of the Company's financial liabilities at December 31, 2023 and 2022, based on contractual undiscounted payments:

(€ thousands)	**On demand**	**Less than 3 months**	**3 to 12 months**	**1 to 5 years**	**> 5 years**	**Total**
December 31, 2023						
Convertible Notes (assuming no conversion)	-	-	3,200	150,000	175,000	328,200
Other long-term debt	-	-	-	2,042	-	2,042
Lease liabilities (Note 19)	-	1,044	3,075	9,669	6,610	20,398
Interest payable convertible	-	563	3,860	16,500	1,641	22,564
Trade payable	13,149	33,740	-	-	-	46,889
Other payables	140	10,534	25,335	-	-	36,009
Total	**13,289**	**45,881**	**35,470**	**178,211**	**183,251**	**456,102**

(€ thousands)	**On demand**	**Less than 3 months**	**3 to 12 months**	**1 to 5 years**	**> 5 years**	**Total**
December 31, 2022						
Convertible Notes (assuming no conversion)	-	-	2,400	182,500	175,000	359,900
Other long-term debt	-	-	-	2,042	-	2,042
Lease liabilities (Note 19)	-	1,120	2,518	8,845	6,947	19,430
Interest payable convertible	-	563	4,066	17,788	4,922	27,339
Trade payable	13,920	27,486	25	-	-	41,431
Other payables	2,903	8,938	29,280	-	-	41,121
Total	**16,823**	**38,107**	**38,289**	**211,175**	**186,869**	**491,263**

It is not expected that the cash flows included in the maturity profile could occur significantly earlier, or at significantly different amounts.

Capital management

The primary objective of the Company's capital management is to ensure healthy capital ratios, with focus on liquidity and financial stability throughout the industry cycles, in order to support its business and maximize shareholder value.

The Company manages its capital structure and makes adjustments to it, in light of changes in economic conditions. To maintain or adjust the capital structure, the Company may make a dividend payment to shareholders, return capital to shareholders or issue new shares. No changes were made in the objectives, policies or processes during the years ended December 31, 2023 and December 31, 2022. The Company only regards equity as capital. This capital is managed using solvency ratio (excluding intangible assets) and return on investment.

(€ thousands, except for percentages)	2023	2022
Equity	421,413	628,535
Solvency ratio[1]	47.0%	55.4%
Solvency ratio (excluding intangible fixed assets)[2]	37.3%	49.7%
Return on average equity[3]	33.7%	38.6%

[1] Solvency ratio is defined as total equity (€ 421.4) divided by total assets (€ 896.6).
[2] Solvency ratio (excluding intangible assets) is defined as total equity (€ 421.4) divided by total assets (€ 896.6), both under subtraction of intangible assets (€ 139.1).
[3] Return on average equity is defined as net income (€ 177.1) divided by the average of the total equity at January 1, 2023 (€ 628.5) and total equity at December 31, 2023 (€ 421.4).

The total number of ordinary shares that will be awarded under the 2020 Framework Incentive Plan may not exceed 1.5% of the total number of outstanding shares at December 31 of the year prior to the year in which the award is made.

32. Events after the balance sheet date

There are no events to report.

Parent Company Balance Sheet

(Before appropriation of the result)

(€ thousands)	Note	December 31, 2023	December 31, 2022
Assets			
Intangible fixed assets	3	**100**	**155**
Tangible fixed assets	4	**19**	**41**
Investments in subsidiaries	5	355,828	490,021
Loans due from subsidiaries	5	11,913	10,683
Financial fixed assets		**367,741**	**500,704**
Total fixed assets		**367,860**	**500,900**
Amounts due from subsidiaries	10	31,158	29,647
Other receivables		4,773	1,850
Receivables		**35,931**	**31,497**
Deposits	6	**225,000**	**180,000**
Cash and cash equivalents	6	**149,736**	**302,161**
Total current assets		**410,667**	**513,658**
Total assets		**778,527**	**1,014,558**
Shareholders' equity, provisions and liabilities			
Share capital	7	811	811
Share premium	7	108,144	271,350
Retained earnings	7	(14,305)	(21,258)
Legal reserves	7	157,962	144,077
Other comprehensive income (loss)	7	(8,283)	(7,092)
Undistributed result	7	177,084	240,647
Shareholders' equity		**421,413**	**628,535**
Deferred tax liabilities	14	5,702	5,720
Provisions		**5,702**	**5,720**
Convertible Notes	9	295,311	320,773
Non-current liabilities		**295,311**	**320,773**
Current portion of long-term debt		3,144	2,361
Trade payables		4,746	4,333
Income tax payable		1,157	1,287
Amounts due to subsidiaries	10	43,925	48,797
Other payables		3,129	2,752
Current liabilities		**56,101**	**59,530**
Total shareholders' equity, provisions and liabilities		**778,527**	**1,014,558**

Parent Company Statement of Income and Expense

(€ thousands)	**Note**	**Year ended December 31, 2023**	**2022**
General and administrative expenses		9,809	7,851
Total operating expenses		**9,809**	**7,851**
Operating income (loss)		**(9,809)**	**(7,851)**
Financial income	12	13,237	1,902
Financial expense	12	(12,138)	(11,706)
Financial income (expense), net		**1,099**	**(9,804)**
Loss before income tax and income from subsidiaries		**(8,710)**	**(17,655)**
Income tax expense (benefit)	14	1,115	(1,918)
Income from subsidiaries, after taxes	5	186,909	256,384
Net income		**177,084**	**240,647**

Notes to the Parent Company Financial Statements

1. General

BE Semiconductor Industries N.V. acts as a holding company. The description of the activities and the structure of the Company, as included in the Notes to the Consolidated Financial Statements also apply to the Parent Company Financial Statements. BE Semiconductor Industries N.V.'s principal executive office is located at Ratio 6, 6921 RW Duiven, the Netherlands. Statutory seat of the Company is Amsterdam; number at Chamber of Commerce is 09092395.

2. Summary of significant accounting policies

The Financial Statements of the parent company have been prepared using the option of article 362.8 of Book 2 of the Netherlands Civil Code, meaning that the accounting principles used are the same as for the Consolidated Financial Statements.

Foreign currency amounts have been translated, assets and liabilities have been valued, and net income has been determined, in accordance with the principles of valuation and determination of income presented in the summary of significant accounting policies included in the Notes to the Consolidated Financial Statements. Subsidiaries of the parent company are accounted for using the net equity value. The net equity value is determined on the basis of IFRS accounting principles applied in the Consolidated Financial Statements. In case of a negative net equity value of a subsidiary, the negative value is deducted from the loan due from the respective subsidiary.

In addition, the Company will apply the option provided to eliminate the impact of IFRS 9 on intercompany receivables and payables in the Parent Company Financial Statements against their book value of these receivables and payables in order to have no impact on the reconciliation between the consolidated equity and company equity position.

BE Semiconductor Industries N.V. is parent of the fiscal unity BE Semiconductor Industries N.V. All current and deferred tax positions attributable to the fiscal unit are reported at the level of BE Semiconductor Industries N.V., whereby income tax expense is allocated to the Dutch subsidiaries based on the individual income before tax and the statutory tax rate taking the innovation box regime into account.

3. Intangible fixed assets

Intangible assets, net consist of the following:

(€ thousands)	**2023**	**2022**
Balance at January 1,		
Cost	2,856	3,370
Accumulated amortization	(2,701)	(2,930)
Intangible fixed assets, net	**155**	**440**
Changes in book value		
Capital expenditures	-	147
Disposals (cost)	-	(661)
Disposals (accumulated depreciation)	-	548
Amortization	(55)	(319)
Total changes	**(55)**	**(285)**
Balance at December 31,		
Cost	2,856	2,856
Accumulated amortization	(2,756)	(2,701)
Intangible fixed assets, net	**100**	**155**

The intangible fixed assets consist of capitalized licenses and are amortized in three to five years.

4. Tangible fixed assets

The tangible fixed assets include right of use assets for leased cars.

5. Financial fixed assets

The movement is as follows:

(€ thousands)	Investment in subsidiaries	Loans due from subsidiaries	Long-term deposits	Total
Balance at January 1, 2023	490,021	10,683	-	500,704
Income for the period	186,909	-	-	186,909
Negative equity adjustments	(1,243)	1,243	-	-
Dividend payments	(322,303)	-	-	(322,303)
Establishment of Besi Vietnam	612	-	-	612
Loans to subsidiaries	-	452	-	452
Merger of group companies	244	-	-	244
Changes in accumulated other comprehensive income	(1,522)	-	-	(1,522)
Currency translation adjustment	3,110	(465)	-	2,645
Balance at December 31, 2023	**355,828**	**11,913**	**-**	**367,741**

(€ thousands)	Investment in subsidiaries	Loans due from subsidiaries	Long-term deposits	Total
Balance at January 1, 2022	485,338	10,379	25,000	520,717
Income for the period	256,384	-	-	256,384
Negative equity adjustments	(1,289)	1,289	-	-
Reclassification of deposits	-	-	(25,000)	(25,000)
Repayment of loans	-	(2,079)	-	(2,079)
Dividend payments	(267,173)	-	-	(267,173)
Changes in accumulated other comprehensive income	8,388	-	-	8,388
Currency translation adjustment	8,373	1,094	-	9,467
Balance at December 31, 2022	**490,021**	**10,683**	**-**	**500,704**

Investments in subsidiaries

The negative equity adjustments in the movement schedule are adjustments of the income for the period related to the net income of the subsidiaries with a negative equity value.

Loans due from/to subsidiaries

Interest on loans due from subsidiaries is calculated based on monthly base rates plus a market-conform mark-up. An amount of € 11.9 million primarily relates to loans granted by BE Semiconductor Industries N.V. to its US subsidiaries. These loans are repaid upon lenders' demand for repayment. Therefore, no interest is calculated on these loans.

Following is an overview of all direct subsidiaries:

Name	Location and country of incorporation	Percentage of ownership
BE Semiconductor Industries Holding GmbH	Radfeld, Austria	100%
BE Semiconductor Industries USA, Inc.	Chandler, Arizona, USA	100%
Besi Leshan Co., Ltd.	Leshan, China	100%
Besi Switzerland AG	Steinhausen, Switzerland	100%
Cong Ty Tnhh Besi Viet Nam	Ho Chi Minh City, Vietnam	100%
Fico International B.V.	Duiven, the Netherlands	100%
Meco Equipment Engineers B.V.	's-Hertogenbosch, the Netherlands	100%

On April 5, 2023, Besi Asia Pacific Holding B.V., Esec International B.V. and Meco International B.V. were merged into BE Semiconductor Industries N.V. As a result of such merger, Besi Switzerland AG and Meco Equipment Engineers B.V. became direct subsidiaries.

6. Cash and cash equivalents and deposits

Interest rates on cash at banks are variable. Short-term deposits have a maturity or notice period between one and three months and carry interest at the respective short-term deposit rates and are reported as part of the cash and cash equivalents. Deposits with initial maturities longer than three months are reported under deposits and deposits with a remaining maturity exceeding twelve months are reported under financial fixed assets. The expected credit loss on cash and cash equivalents and deposits is considered immaterial.

At December 31, 2023 and 2022, no amount in cash and cash equivalents and deposits was restricted.

7. Shareholder's equity

Besi's authorized share capital consisted of 160,000,000 ordinary shares, nominal value € 0.01 per share, and 160,000,000 preference shares, nominal value € 0.01 per share.

(€ thousands, except for share data)	Number of ordinary shares outstanding[1]	Share capital	Share premium	Retained earnings	Legal reserves	Other comprehensive income (loss)	Undistributed result	Total shareholders' equity
Balance at January 1, 2023	**81,146,738**	**811**	**271,350**	**(21,258)**	**144,077**	**(7,092)**	**240,647**	**628,535**
Total comprehensive income for the period	-	-	-	-	2,300	(1,191)	177,084	178,193
Dividend paid to owners of the Company[2]	-	-	-	-	-	-	(222,109)	(222,109)
Convertible Notes converted into equity[3]	-	-	31,074	-	-	-	-	31,074
Changes in legal reserve	-	-	-	(11,585)	11,585	-	-	-
Appropriation of the result	-	-	-	18,538	-	-	(18,538)	-
Equity-settled share-based payments expense[4]	-	-	19,107	-	-	-	-	19,107
Purchase of treasury shares[5]	-	-	(213,387)	-	-	-	-	(213,387)
Balance at December 31, 2023	**81,146,738**	**811**	**108,144**	**(14,305)**	**157,962**	**(8,283)**	**177,084**	**421,413**

[1] The outstanding number of ordinary shares includes 4,130,944 and 2,658,812 treasury shares at December 31, 2023 and December 31, 2022, respectively.
[2] Represents € 2.85 dividend per share, approved at Besi's AGM on April 26, 2023 and paid in cash in May 2023.
[3] Represents the carrying amount of the 2016 and 2017 Convertible Notes upon conversion by bondholders. Further reference is made to the Notes to the Consolidated Financial Statements, Note 18.
[4] Reference is made to the Notes to the Consolidated Financial Statements, Note 25.
[5] The Company repurchased 2,556,665 ordinary shares in 2023 for an aggregate value of € 213.4 million.

(€ thousands, except for share data)	Number of ordinary shares outstanding	Share capital	Share premium	Retained earnings	Legal reserves	Other comprehensive income (loss)	Undistributed result	Total shareholders' equity
Balance at January 1, 2022	**78,567,842**	**786**	**251,149**	**(21,208)**	**117,741**	**(11,613)**	**282,419**	**619,274**
Total comprehensive income for the period	-	-	-	-	13,334	4,521	240,647	258,502
Dividend paid to owners of the Company	-	-	-	-	-	-	(269,467)	(269,467)
Convertible Notes converted into equity	2,578,896	25	135,151	-	-	-	-	135,176
Changes in legal reserve	-	-	-	(13,002)	13,002	-	-	-
Appropriation of the result	-	-	-	12,952	-	-	(12,952)	-
Equity-settled share-based payments expense	-	-	15,259	-	-	-	-	15,259
Purchase of treasury shares	-	-	(146,781)	-	-	-	-	(146,781)
Equity component new Convertible Notes	-	-	16,572	-	-	-	-	16,572
Balance at December 31, 2022	**81,146,738**	**811**	**271,350**	**(21,258)**	**144,077**	**(7,092)**	**240,647**	**628,535**

Changes in legal reserves during 2023 and 2022 are as follows:

(€ thousands)	Currency translation adjustment	Capitalized research and development expenses	Reserves for subsidiaries	Cash flow hedging	Total legal reserves
Balance at January 1, 2023	54,238	80,844	4,521	4,474	144,077
Total comprehensive income (loss) for the period	2,631	-	-	(331)	2,300
Transfer from retained earnings	-	12,422	(837)	-	11,585
Balance at December 31, 2023	**56,869**	**93,266**	**3,684**	**4,143**	**157,962**
Balance at January 1, 2022	44,771	67,945	4,418	607	117,741
Total comprehensive income (loss) for the period	9,467	-	-	3,867	13,334
Transfer from retained earnings	-	12,899	103	-	13,002
Balance at December 31, 2022	**54,238**	**80,844**	**4,521**	**4,474**	**144,077**

Preference shares

Besi's authorized share capital consists of 160,000,000 ordinary shares, nominal value € 0.01 per share, and 160,000,000 preference shares, nominal value € 0.01 per share.

No preference shares were outstanding at December 31, 2023 and December 31, 2022.

In April 2000, the foundation "Stichting Continuïteit BE Semiconductor Industries" (the "Foundation") was established. The Foundation is an independent legal entity and is not owned or controlled by any other legal person. The purpose of the Foundation is to safeguard the interests of the Company, the enterprise connected therewith and all the parties having an interest therein and to exclude as much as possible influences which could threaten, among other things, the continuity, independence and identity of the Company contrary to such interests. The aim of the preference shares is, among other things, to provide a protective measure against unfriendly take-over bids and other possible unsolicited influences which could threaten the Company's continuity, independence and identity. The issue of preference shares would enable the Company to consider its position in the then-existing circumstances.

By agreement of May 19, 2008, between the Company and the Foundation, which replaces a similar agreement dated April 19, 2002, the Foundation has been granted a call option pursuant to which it may purchase a number of preference shares up to a maximum of the number of ordinary shares issued and outstanding at the time of exercise of this option, minus one.

The Company has also granted to the Foundation the right to file an application for an inquiry into the policy and conduct of business of the Company with the Enterprise Chamber of the Amsterdam Court of Appeal (*Ondernemingskamer*). The Company believes that this may be a useful option in the period before the issuance of preference shares, without causing a dilution of the rights of other shareholders at that stage.

Foreign currency translation adjustment

The foreign currency translation adjustment comprises all foreign currency differences arising from the translation of the financial statements of foreign operations.

Accumulated other comprehensive income (loss)
Accumulated other comprehensive income (loss) consists of:

(€ thousands)	December 31, 2023	December 31, 2022
Actuarial gains (losses)	(9,924)	(8,633)
Deferred taxes	878	778
Others	763	763
Accumulated other comprehensive income (loss)	**(8,283)**	**(7,092)**

Actuarial gains (losses)
The reserve for actuarial gains and losses arises from the actuarial calculations for the defined benefit pension plans.

Deferred taxes
The deferred taxes in accumulated other comprehensive income (loss) primarily relate to the deferred tax on the recognized actuarial gains and losses on the pension plans and cash flow hedges.

Dividends
Proposed for approval at the Annual General Meeting of Shareholders to be held on April 25, 2024 (not recognized as a liability as at December 31, 2023 and December 31, 2022):

(€ thousands)	December 31, 2023	December 31, 2022
€ 2.15 per ordinary share (2022: € 2.85)	**165,584**	**223,691**

The Board of Management proposes to allocate the part of the net income for the year 2023 remaining after payment of the dividend to the retained earnings. The Supervisory Board has approved this proposal.

8. Borrowing facilities
A summary of Besi's principal credit lines is as follows:
- A € 80 million committed revolving credit facility with a consortium of European banks ("the Facility"), which matures in 2026. Outstanding amounts under this credit facility will bear interest at ESTR/SOFR plus a margin that depends on the Company's financial position. The agreement can be increased to € 136 million. Borrowings under the Facility can be repaid at any time at 100% of principal amount and can be used for working capital and other corporate purposes. The principal covenants associated with the Facility include a maintenance test of Consolidated Debt to Equity and a limitation on the incurrence of additional permitted indebtedness. The Facility is granted without securities.
- An uncommitted overdraft facility of € 10.0 million for the purpose of short-term overdrafts (maximum of 15 days) in current accounts. The facility has no contractual maturity date.
- A credit line of € 1.0 million for bank guarantees is granted without securities. The borrowing facility has no contractual maturity date.

No borrowings were utilized.

9. Convertible Notes
Reference is made to the Notes to the Consolidated Financial Statements, Note 18.

10. Amounts due from/due to subsidiaries
Amounts due from/due to subsidiaries consist of non-interest bearing short-term receivables and payables and interest bearing cash pool positions, which are calculated based on market-rates.

11. Commitments and contingencies
BE Semiconductor Industries N.V. has assumed joint and several liabilities in accordance with article 403 Part 9 of Book 2 of The Dutch Civil Code with respect to all its Dutch subsidiaries.

BE Semiconductor Industries N.V. is parent of the fiscal unit BE Semiconductor Industries N.V. and is therefore liable for the liabilities of the fiscal unit as a whole. The fiscal unit consists of BE Semiconductor Industries N.V., Fico International B.V., Besi Netherlands B.V., and Meco Equipment Engineers B.V.

The credit facilities of Besi Leshan Co. Ltd. and Besi Singapore Pte. Ltd. for an aggregate value of € 6.2 million are secured by a parent company guarantee.

12. Financial income and expense

The components of financial income and expense are as follows:

(€ thousands)	Year ended December 31, 2023	2022
Interest income	11,439	1,008
Interest income from subsidiaries	1,269	591
Net cost of hedging	529	284
Net foreign currency results	-	19
Subtotal financial income	**13,237**	**1,902**
Interest expense	(10,984)	(11,423)
Interest expense to subsidiaries	(1,140)	(283)
Net foreign currency results	(14)	-
Subtotal financial expense	**(12,138)**	**(11,706)**
Financial income (expense), net	**1,099**	**(9,804)**

13. Selected operating expenses and additional information

Personnel expenses for all employees are as follows:

(€ thousands)	Year ended December 31, 2023	2022
Wages and salaries	2,745	2,654
Social security expenses	158	133
Pension and retirement expenses	349	323
Share-based compensation plans	19,107	15,259
Other personnel costs	555	519
Total personnel expenses	**22,914**	**18,888**

Certain selected operating expenses are recharged to subsidiaries.

The average number of employees during 2023 and 2022 was 12 and 11, respectively.

The remuneration paragraph is included in Note 25 of the Consolidated Financial Statements and reference is also made to the Remuneration Report included in this Annual Report.

14. Income taxes

The deferred tax liabilities of € 5.7 million at December 31, 2023 is mainly related to temporary difference in the fiscal and commercial valuation on the Convertible Notes and inventories. A summary of the changes is as follows:

(€ thousands)	2023	2022
Balance at January 1	5,720	3,117
Movement through profit and loss	201	(1,215)
Movement through equity	(219)	3,818
Deferred tax liabilities December 31	**5,702**	**5,720**

The reconciliation of income tax benefit is as follows:

(€ thousands)	Year ended December 31, 2023	in % of loss before taxes	Year ended December 31, 2022	in % of loss before taxes
Expected income tax expense (benefit) based on domestic rate	(2,247)	25.8%	(4,555)	25.8%
Non-deductible expenses	3,120	(35.8%)	2,779	(15.7%)
Tax incentive	62	(0.7%)	(150)	0.8%
Other	180	(2.1%)	8	(0.0%)
Income tax expense (benefit) reported	**1,115**	**(12.8%)**	**(1,918)**	**10.9%**

15. Additional information

Cost of services provided by external auditor

Ernst & Young Accountants LLP has served as our independent registered public accounting firm for the year 2023 and 2022. The following table sets out the aggregated fees for professional audit services and other services rendered by Ernst & Young Accountants LLP and its member firms and/or affiliates in 2023 and 2022.

(€ thousands)	Ernst & Young Accountants LLP	E&Y Network	Year ended December 31, 2023	Ernst & Young Accountants LLP	E&Y Network	Year ended December 31, 2022
Audit services	436	213	649	377	210	587
Other assurance services	154	7	161	98	-	98
Other non-audit services	-	-	-	-	7	7
Total costs	**590**	**220**	**810**	**475**	**217**	**692**

16. Events after the balance sheet date

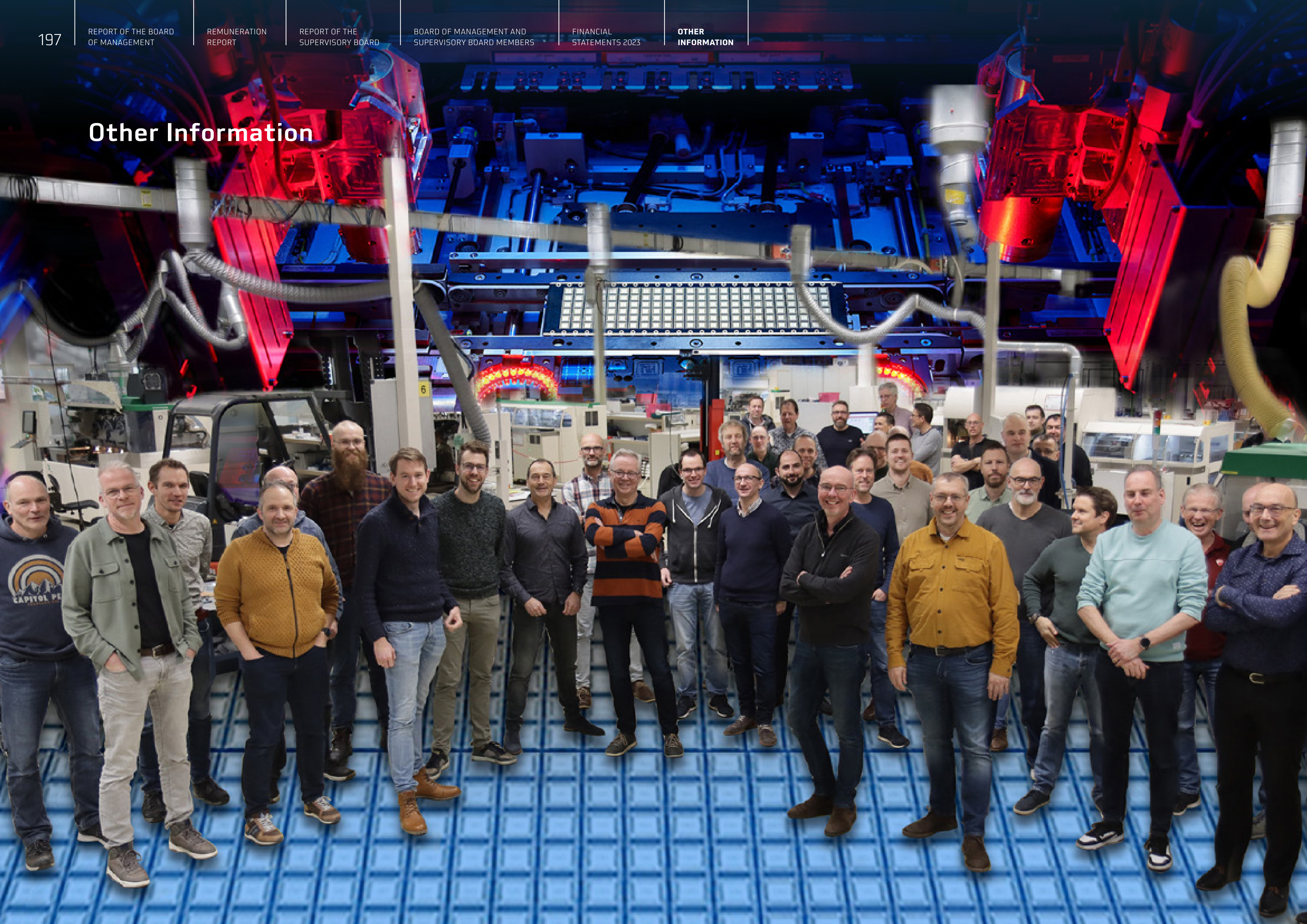
There are no events to report.

Duiven, February 21, 2024

Board of Management
Richard W. Blickman

Supervisory Board
Richard Norbruis
Carlo Bozotti
Elke Eckstein
Niek Hoek
Laura Oliphant

Other Information



Corporate Information

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The Netherlands
Tel. (31) 26 319 4500
www.besi.com
e-mail: info@besi.com, investor.relations@besi.com

For addresses of Besi's offices and manufacturing facilities worldwide, please visit Besi's website: **www.besi.com**.

Transfer Agent
Ordinary shares (euro)
ABN AMRO Bank N.V., Amsterdam, the Netherlands

Independent Auditors
Ernst & Young Accountants LLP, Eindhoven, the Netherlands

Legal Counsels
Freshfields Bruckhaus Deringer, Amsterdam, the Netherlands
Taylor Wessing N.V., Amsterdam, the Netherlands

Trade Register
Chamber of Commerce, Arnhem, the Netherlands
Number 09092395

Statutory Financial Statements
The statutory financial statements of BE Semiconductor Industries N.V. will be filed with the Chamber of Commerce, Arnhem, the Netherlands.

Annual General Meeting
The Annual General Meeting of Shareholders will be held on April 25, 2024, 10.30 a.m.

Board of Management

Richard W. Blickman (1954)
Chief Executive Officer,
Chairman of the Board of Management

Management Team Members

Chris Scanlan (1969)
SVP Technology

Christoph Scheiring (1970)
SVP Die Attach

Peter Wiedner (1970)
SVP Sub Micron Die Attach

Jeroen Kleijburg (1974)
SVP Packaging

Bart Berenbak (1971)
VP Plating

Henk Jan Jonge Poerink (1970)
SVP Global Operations

Jong Kwon Park (1966)
SVP Sales & Customer Service APac

René Hendriks (1961)
SVP Sales Europe/North America

Leon Verweijen (1976)
SVP Finance

Other Members of Management

Kin Mun Kok (1980)
VP Besi Product Asia

Seng Poh Ho (1972)
VP Support Center Asia

Michael Leu (1962)
VP Strategic Supply Management

Andrea Kopp-Battaglia (1978)
VP Finance Die Attach

Independent Auditor's Report

To: the shareholders and Supervisory Board of BE Semiconductor Industries N.V.

Report on the audit of the financial statements 2023 included in the Annual Report

Our opinion

We have audited the financial statements for 2023 of BE Semiconductor Industries N.V. ("the Company") based in Amsterdam. The financial statements comprise the Consolidated and Parent Company Financial Statements.

In our opinion:

- The accompanying Consolidated Financial Statements give a true and fair view of the financial position of BE Semiconductor Industries N.V., as at December 31, 2023 and of its result and its cash flows for 2023 in accordance with International Financial Reporting Standards as adopted by the European Union (EU-IFRSs) and with Part 9 of Book 2 of the Dutch Civil Code.
- The accompanying Parent Company Financial Statements give a true and fair view of the financial position of BE Semiconductor Industries N.V. as at December 31, 2023 and of its result for 2023 in accordance with Part 9 of Book 2 of the Dutch Civil Code.

The Consolidated Financial Statements comprise:

- The Consolidated Statement of Financial Position as at December 31, 2023.
- The following statements for 2023: the Consolidated Statement of Operations, the Consolidated Statement of Comprehensive Income, the Consolidated Statement of Changes in Equity and the Consolidated Statement of Cash Flows.
- The Notes comprising a summary of the significant accounting policies and other explanatory information.

The Parent Company Financial Statements comprise:

- The Parent Company Balance Sheet as at December 31, 2023.
- The Parent Company Statement of Income and Expense for 2023.
- 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 BE Semiconductor Industries N.V. in accordance with the EU Regulation on specific requirements regarding statutory audit 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.

Information in support of our opinion

We designed our audit procedures in the context of our audit of the financial statements as a whole and in forming our opinion thereon. The following information in support of our opinion and any findings were addressed in this context, and we do not provide a separate opinion or conclusion on these matters.

Our understanding of the business

BE Semiconductor Industries N.V. is the holding company for a worldwide business engaged in the development, production, marketing and sales of back-end equipment for the semiconductor industry. The group is structured in components and we tailored our group audit approach accordingly. We paid specific attention in our audit to a number of areas driven by the operations of the group and our risk assessment.

We determined materiality and identified and assessed the risks of material misstatement of the financial statements, whether due to fraud or error in order to design audit procedures responsive to those risks and to obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

Materiality

Materiality	€ 10,000,000 (2022: € 13,750,000)
Benchmark applied	Around 5% of profit before tax
Explanation	Based on our professional judgement we have considered an earnings-based measure as the appropriate basis to determine materiality. We consider income before income tax to be the most relevant measure given the nature of the business and the users of the financial statements.

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 € 500,000, 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.

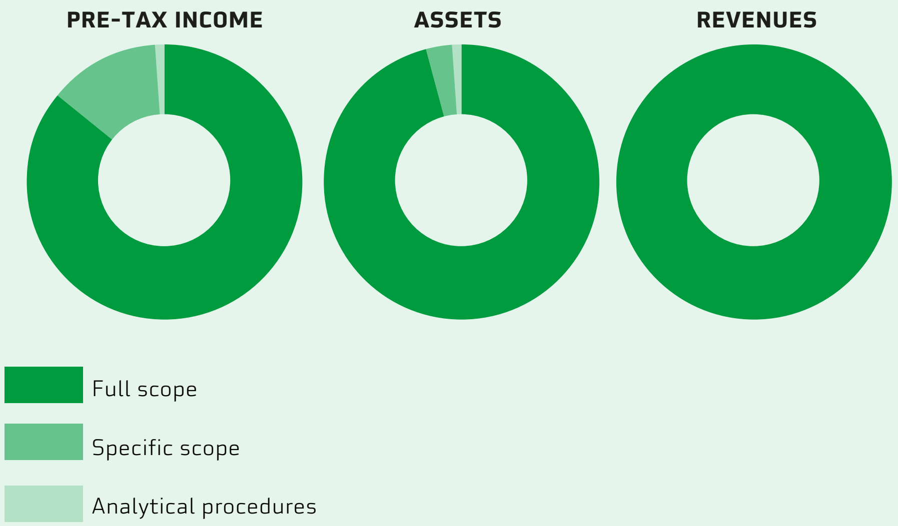
Scope of the group audit

BE Semiconductor Industries N.V. is at the head of a group of entities. The financial information of this group is included in the Consolidated Financial Statements.

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 entities. Decisive were the size and/or the risk profile of the group entities or operations. On this basis, we selected group entities for which an audit had to be carried out on the complete set of financial information or specific items.

Our group audit mainly focused on significant group entities in China, Malaysia, Singapore, Switzerland (full scope components) and Austria and the Netherlands (specific scope components). We allocated components an audit of the complete financial information (full scope components) or we allocated components a specific scope to perform audit procedures on specific account balances that we considered had the potential for the greatest impact on the significant accounts in the financial statements, either because of the size of these accounts or their risk profile. The central audit team performed audit procedures on accounting areas managed centrally, such as the key audit matter related to revenue recognition, the assessment of forward-looking information, the majority of the audit procedures of the Swiss and Dutch components and other centralized accounts. We used EY offices in the other countries for the remaining full scope and specific scope components. We performed analytical procedures for the other group entities not assigned a full scope or specific scope.

In total these procedures resulted in the following coverage:



By performing the procedures mentioned above at components of the group, 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 on the Consolidated Financial Statements.

Teaming and use of specialists

We ensured that the audit teams both at group and at component levels included the appropriate skills and competences which are needed for the audit of a listed client in the semiconductor industry. We included specialists in the areas of IT audit, forensics, sustainability and income tax and have made use of our own experts in the areas of transfer pricing and valuation.

Our focus on climate risks and the energy transition

Climate change and the energy transition are high on the public agenda. Issues such as CO_2 reduction impact financial reporting, as these issues entail risks for the business operation, the valuation of assets (stranded assets) and provisions or the sustainability of the business model and access to financial markets of companies with a larger CO_2 footprint. The Board of Management summarized BE Semiconductor Industries N.V.'s commitments and obligations, and reported in the Environmental, Social and Governance Report how the Company is addressing climate-related and environmental risks.

As part of our audit of the financial statements, we evaluated the extent to which climate-related risks and the effects of the energy transition and the Company's commitments and (constructive) obligations, are taken into account in estimates and significant assumptions, especially in the area of impairment of goodwill, as well as in the design of relevant internal control measures. Furthermore, we read the Report of the Board of Management and considered whether there is any material inconsistency between the non-financial information in the Environmental, Social and Governance Report and the Consolidated Financial Statements.

Based on the audit procedures performed, we do not deem climate-related risks to have a material impact on the financial reporting judgements, estimates or significant assumptions as at December 31, 2023.

Our focus on fraud and non-compliance with laws and regulations

Our responsibility

Although we are not responsible for preventing fraud or non-compliance and we cannot be expected to detect non-compliance with all laws and regulations, it is our responsibility to obtain reasonable assurance that the financial statements, taken as a whole, are free from material misstatement, whether caused by fraud or error. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

Our audit response related to fraud risks

We identified and assessed the risks of material misstatements of the financial statements due to fraud. During our audit we obtained an understanding of the Company and its environment and the components of the system of internal control, including the risk assessment process and management's process for responding to the risks of fraud and monitoring the system of internal control and how the Supervisory Board exercises oversight, as well as the outcomes. We refer to the "Risk Management" section of the Report of the Board of Management for management's fraud risk assessment.

We evaluated the design and relevant aspects of the system of internal control and in particular the fraud risk assessment, as well as the code of conduct, whistleblower procedures and incident registration. We evaluated the design and the implementation of internal controls designed to mitigate fraud risks.

As part of our process of identifying fraud risks, we evaluated fraud risk factors with respect to financial reporting fraud, misappropriation of assets and bribery and corruption, in close co-operation with our forensic specialists. We evaluated whether these factors indicate that a risk of material misstatement due to fraud is present.

We incorporated elements of unpredictability in our audit. We also considered the outcome of our other audit procedures and evaluated whether any findings were indicative of fraud or non-compliance.

We addressed the risks related to management override of controls, as this risk is present in all companies. For these risks we have performed procedures among other things to evaluate key accounting estimates for management bias that may represent a risk of material misstatement due to fraud, in particular relating to important judgement areas and significant accounting estimates as disclosed in Note 2 to the financial statements. We have also used data analysis to identify and address high-risk journal entries and evaluated the business rationale (or the lack thereof) of significant extraordinary transactions, including those with related parties. Additionally, in order to respond to the identified risks of management override of controls, we specifically tested manual journal entries in revenues with supporting evidence.

The following fraud risk identified did require significant attention during our audit:

Presumed risks of fraud in revenue recognition

Fraud risk	Our audit approach
When identifying and assessing fraud risks we presume that there are risks of fraud in revenue recognition. The Company recognizes revenue when it transfers control over a product or service to a customer. Revenue recognition is considered a fraud risk as revenue is a focus area for the Company. These revenues are disclosed in Note 2 and 23 to the Consolidated Financial Statements for the significant accounting policies on revenue recognition.	We describe the audit procedures responsive to the presumed risk of fraud in revenue recognition in the description of our audit approach for the key audit matter "Revenue Recognition".

We considered available information and made enquiries of relevant executives, directors (including internal audit, and regional directors) and the Supervisory Board.

The fraud risk we identified, enquires and other available information did not lead to specific indications for fraud or suspected fraud potentially materially impacting the view of the financial statements.

Our audit response related to risks of non-compliance with laws and regulations

We performed appropriate audit procedures regarding compliance with the provisions of those laws and regulations that have a direct effect on the determination of material amounts and disclosures in the financial statements. Furthermore, we assessed factors related to the risks of non-compliance with laws and regulations that could reasonably be expected to have a material effect on the financial statements from our general industry experience, through discussions with the Board of Management, reading minutes, inspection of internal audit and compliance reports and performing substantive tests of details of classes of transactions, account balances or disclosures.

We also inspected lawyers' letters and we have been informed by the Board of Management that there was no correspondence with regulatory authorities and remained alert to any indication of (suspected) non-compliance throughout the audit. Finally we obtained written representations that all known instances of non-compliance with laws and regulations have been disclosed to us.

Our audit response related to going concern

As disclosed in Note 1 to the Consolidated Financial Statements and the "Internal control and risk management" section in the Report of the Board of Management, the financial statements have been prepared on a going concern basis. When preparing the financial statements, the Board of Management made a specific assessment of the Company's ability to continue as a going concern and to continue its operations for the foreseeable future.

We discussed and evaluated the specific assessment with the Board of Management exercising professional judgement and maintaining professional skepticism. We considered whether management's going concern assessment, based on our knowledge and understanding obtained through our audit of the financial statements or otherwise, contains all relevant events or conditions that may cast significant doubt on the Company'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.

Based on our procedures performed, we did not identify material uncertainties about going concern. 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.

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 matter to the Supervisory board. The key audit matters are not a comprehensive reflection of all matters discussed.

In comparison with previous year, the nature of our key audit matter did not change.

Revenue recognition

Risk	Our audit approach	Key observations
The Company recognizes revenue when it transfers control over a product or service to a customer. Revenue recognition is considered a key audit matter as revenue is a focus area for the Company. We identified the following fraud risks related to improper revenue recognition for the Company: 1. Cut-off of sales transactions before year end for machine sales. 2. Issuance of invoices and manual journal entries for fictious transactions in external revenues (which are never settled in cash). Reference is made to Note 2 and 23 to the Consolidated Financial Statements for the significant accounting policies on revenue recognition.	We have assessed the appropriateness of the Company's revenue recognition accounting policies, understanding the internal control environment and assessed compliance with EU-IFRS accounting policies (IFRS 15). Our audit procedures included, amongst others, testing individual sales orders and transactions to assess proper identification of the identifiable performance obligations in the contracts and correct allocation of the transaction price to these performance obligations and recognition hereof. We also tailored our audit procedures to address our fraud risk. We used data analytics to correlate revenues to cash receipts and performed subsequent collection testing on trade receivables. Furthermore, we tested manual journal entries with supporting evidence. We also selected sales transactions before and after year end to assess whether revenue was recognized in the correct period by, amongst others, inspection of sales contracts, client acceptance documents and shipping documents. We also evaluated the adequacy of the disclosures provided by the Company in Note 2 and 23.	We assessed that the Company's revenue recognition accounting policies were appropriately applied and disclosed in Note 2 and 23 in the Consolidated Financial Statements.

Report on other information included in the Annual Report

The Annual Report contains other information in addition to the financial statements and our auditor's report thereon.

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 for the Report of the Board of Management and the other information as required by Part 9 of Book 2 of the Dutch Civil Code and as required by Sections 2:135b and 2:145 sub section 2 of the Dutch Civil Code for the remuneration report.

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 and Section 2:135b sub-Section 7 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.

The Board of Management is responsible for the preparation of the other information, including the Report of the Board of Management in accordance with Part 9 of Book 2 of the Dutch Civil Code and other information required by Part 9 of Book 2 of the Dutch Civil Code. The Board of Management and the Supervisory Board are responsible for ensuring that the remuneration report is drawn up and published in accordance with Sections 2:135b and 2:145 sub section 2 of the Dutch Civil Code.

Report on other legal and regulatory requirements and ESEF

Engagement
We were engaged by the general meeting as auditor of BE Semiconductor Industries N.V. on April 26, 2018, as of the audit for the year 2018 and have operated as statutory auditor ever since that date.

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 audit of public-interest entities.

European Single Electronic Reporting Format (ESEF)
BE Semiconductor Industries N.V. has prepared the Annual Report in ESEF. The requirements for this are set out in the Delegated Regulation (EU) 2019/815 with regard to regulatory technical standards on the specification of a single electronic reporting format (hereinafter: the RTS on ESEF).

In our opinion the Annual Report prepared in the XHTML format, including the (partially) marked-up Consolidated Financial Statements as included in the reporting package by BE Semiconductor Industries N.V., complies in all material respects with the RTS on ESEF.

BE Semiconductor Industries N.V. is responsible for preparing the Annual Report, including the financial statements, in accordance with the RTS on ESEF, whereby management combines the various components into a single reporting package.

Our responsibility is to obtain reasonable assurance for our opinion whether the Annual Report in this reporting package complies with the RTS on ESEF.

We performed our examination in accordance with Dutch law, including Dutch Standard 3950N, "*Assurance-opdrachten inzake het voldoen aan de criteria voor het opstellen van een digitaal verantwoordingsdocument*" (assurance engagements relating to compliance with criteria for digital reporting). Our examination included amongst others:
- Obtaining an understanding of the entity's financial reporting process, including the preparation of the reporting package.
- Identifying and assessing the risks that the Annual Report does not comply in all material respects with the RTS on ESEF and designing and performing further assurance procedures responsive to those risks to provide a basis for our opinion, including:
  - Obtaining the reporting package and performing validations to determine whether the reporting package containing the Inline XBRL instance document and the XBRL extension taxonomy files, has been prepared in accordance with the technical specifications as included in the RTS on ESEF.
  - Examining the information related to the Consolidated Financial Statements in the reporting package to determine whether all required mark-ups have been applied and whether these are in accordance with the RTS on ESEF.

Description of responsibilities regarding the financial statements

Responsibilities of the Board of Management and the Supervisory Board for the financial statements

The Board of Management is responsible for the preparation and fair presentation of the financial statements in accordance with EU-IFRSs and Part 9 of Book 2 of the Dutch Civil Code. Furthermore, the Board of Management is responsible for such internal control as the Board of 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, the Board of Management is responsible for assessing the Company's ability to continue as a going concern. Based on the financial reporting framework mentioned, the Board of Management should prepare the financial statements using the going concern basis of accounting unless the Board of Management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so. The Board of Management 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 Company'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.

We have exercised professional judgement and have maintained professional skepticism throughout the audit, in accordance with Dutch Standards on Auditing, ethical requirements and independence requirements. The "Information in support of our opinion" section above includes an informative summary of our responsibilities and the work performed as the basis for our opinion.

Our audit further included among others:
- Performing audit procedures responsive to the risks identified, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion.
- 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 Company's internal control.
- Evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board of Management.
- Evaluating the overall presentation, structure and content of the financial statements, including the disclosures.
- Evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Communication

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 of the Supervisory Board in accordance with Article 11 of the EU Regulation on specific requirements regarding statutory audit 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.

Eindhoven, February 21, 2024

Ernst & Young Accountants LLP

N. van Es

Assurance report of the independent auditor on the ESG Report

To: the shareholders and Supervisory Board of BE Semiconductor Industries N.V.

Our conclusions

We have performed a limited assurance engagement on the chapter "Environmental, Social and Governance Report", with the exception of the section "EU Taxonomy" (hereafter: the ESG Report) of the accompanying Annual Report for 2023 of BE Semiconductor Industries N.V. (hereafter: the Company) at Amsterdam.

Furthermore, we have performed a reasonable assurance engagement on the section "Materiality assessment" included as part of the ESG Report on pages 52 and 53 in the Annual Report 2023.

Based on our procedures performed and the assurance information obtained, nothing has come to our attention that causes us to believe that the ESG Report does not present fairly, in all material respects:
- the policy with regard to Environmental, Social and Governance matters;
- the business operations, events and achievements in that area in 2023;

in accordance with the applicable criteria as included in the section "Criteria".

In our opinion the section "Materiality assessment" is prepared, in all material respects, in accordance with the applicable criteria as included in the section "Criteria".

Basis for our conclusions

We have performed our assurance engagement on the ESG Report in accordance with Dutch law, including Dutch standard 3810N, "*Assurance-opdrachten inzake duurzaamheidsverslaggeving"* (Assurance engagements relating to sustainability reporting), which is a specified Dutch Standard that is based on the International Standard on Assurance Engagements (ISAE) 3000, "Assurance engagements other than audits or reviews of historical financial information". Our responsibilities in this regard are further described in the section "Our responsibilities" of our report.

We are independent of BE Semiconductor Industries N.V. in accordance with the "*Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten"* (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence). This includes that we do not perform any activities that could result in a conflict of interest with our independent assurance engagement. Furthermore, we have complied with the "*Verordening gedrags- en beroepsregels accountants"* (VGBA, Dutch Code of Ethics for Professional Accountants).

We believe that the assurance evidence we have obtained is sufficient and appropriate to provide a basis for our conclusions.

Criteria

The criteria applied for the preparation of the ESG Report are the Sustainability Reporting Standards of the Global Reporting Initiative (GRI Standards) and the Semiconductors Sustainability Accounting Standards of the Sustainability Accounting Standard Board (SASB), supplemented with own developed reporting criteria as disclosed in section "ESG reporting framework" of the Annual Report 2023 and in the "Appendices to the Environmental, Social and Governance Report 2023" on the Company's website.

The ESG Report is prepared with reference to the GRI Standards. The GRI Standards used are listed in the GRI Content Index as disclosed in the "Appendices to the Environmental, Social and Governance Report 2023" on the Company's website.

The comparability of the ESG information between entities and over time may be affected by the absence of a uniform practice on which to draw, to evaluate and measure this information. This allows for the application of different, but acceptable, measurement techniques.

Consequently, the ESG Report needs to be read and understood together with the criteria applied.

Corresponding sustainability information not assured

The information in the ESG Report for the periods prior to 2021 has not been part of an assurance engagement. Consequently, the corresponding information in the ESG Report and thereto related disclosures for the periods prior to 2021 are not assured with limited assurance. Our conclusions are not modified in respect of this matter.

Limitations to the scope of our assurance engagement

The ESG Report includes prospective information such as ambitions, strategy, plans, expectations and estimates. Prospective information relates to events and actions that have not yet occurred and may never occur. We do not provide assurance on the assumptions and achievability of this prospective information.

The references to external sources or websites in the ESG Report are not part of the ESG Report as included in the scope of or the criteria applied in our assurance engagement, with the exception of the "Appendices to the Environmental, Social and Governance Report 2023" on the Company's website. We therefore do not provide assurance on this information.

Our conclusions are not modified in respect of these matters.

Responsibilities of the Board of Management and the Supervisory Board for the ESG Report

The Board of Management is responsible for the preparation and fair presentation of the ESG Report in accordance with the criteria as included in the section "Criteria", including the identification of stakeholders and the definition of material matters. The Board of Management is also responsible for selecting and applying the criteria and for determining that these criteria are suitable for the legitimate information needs of stakeholders, considering applicable law and regulations related to reporting. The choices made by the Board of Management regarding the scope of the ESG Report and the reporting policy are summarized in the chapter "ESG reporting framework" of the Annual Report.

Furthermore, the Board of Management is responsible for such internal control as it determines is necessary to enable the preparation of the ESG Report that is free from material misstatement, whether due to fraud or error.

The Supervisory Board is responsible for overseeing the sustainability reporting process of BE Semiconductor Industries N.V.

Our responsibilities

Our responsibility is to plan and perform the assurance engagement in a manner that allows us to obtain sufficient and appropriate assurance evidence for our conclusions.

Our assurance engagement of the ESG Report is aimed to obtain a limited level of assurance to determine the plausibility of the ESG Report. The procedures vary in nature and timing from, and are less in extent, than for a reasonable assurance engagement. The level of assurance obtained in a limited assurance engagement is therefore substantially less than the assurance that is obtained when a reasonable assurance engagement is performed.

Our assurance engagement of the section "Materiality assessment" has been performed with a high, but not absolute, level of assurance, which means we may not have detected all material fraud and errors during our assurance engagement.

We apply the "*Nadere voorschriften kwaliteitssystemen*" (NVKS, regulations for quality management systems) and accordingly maintain a comprehensive system of quality management including documented policies and procedures regarding compliance with ethical requirements, professional standards and other relevant legal and regulatory requirements.

For a more detailed description of our responsibilities, we refer to the appendix of this assurance report.

Amsterdam, February 21, 2024

Ernst & Young Accountants LLP

J. Niewold

Appendix to the assurance report of the independent auditor on the ESG Report

Our assurance engagement included amongst others:

- Performing an analysis of the external environment and obtaining an understanding of relevant sustainability themes and issues and the characteristics of the Company.
- Evaluating the appropriateness of the criteria applied used, their consistent application and related disclosures in the ESG Report. This includes the evaluation of the Company's materiality assessment and the reasonableness of estimates made by the Board of Management.
- Reading the information in the Annual Report which is not included in the scope of our assurance engagement to identify material inconsistencies, if any, with the ESG Report.
- Reconciling the relevant financial information with the financial statements.

Our limited assurance engagement of the ESG Report included amongst others:

- Obtaining through inquiries a general understanding of the internal control environment, the reporting processes, the information systems and the entity's risk assessment process relevant to the preparation of the ESG Report, without obtaining assurance information about the implementation or testing the operating effectiveness of controls.
- Identifying areas of the ESG Report where misleading or unbalanced information or a material misstatement, whether due to fraud or error, is likely to arise. Designing and performing further assurance procedures aimed at determining the plausibility of the ESG Report responsive to this risk analysis. These procedures consisted amongst others of:
  - Making inquiries of management and relevant staff at corporate level responsible for the sustainability strategy, policy and results.
  - Interviewing relevant staff responsible for providing the information for, carrying out controls on, and consolidating the data in the ESG Report.
  - Obtaining assurance evidence that the ESG Report reconciles with underlying records of the Company.
  - Reviewing, on a limited sample basis, relevant internal and external documentation.
  - Considering the data and trends.
- Considering the overall presentation and balanced content of the ESG Report.
- Considering whether the ESG Report as a whole, including the sustainability matters and disclosures, is clearly and adequately disclosed in accordance with the criteria applied.

Our reasonable assurance engagement of the section "Materiality assessment" included amongst others:

- Obtaining an understanding of the systems and processes for collecting, reporting, and consolidating the section "Materiality assessment", including obtaining an understanding of the internal control environment relevant to our assurance engagement, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Identifying and assessing the risks that the section "Materiality assessment" is misleading or unbalanced, or contains material misstatements, whether due to fraud or error. Designing and performing further assurance procedures responsive to those risks, and obtaining assurance evidence that is sufficient and appropriate to provide a basis for our opinion. These procedures consisted amongst others of:
  - Making inquiries of management and relevant staff at corporate level responsible for the sustainability strategy, policy and results.
  - Reading minutes of the meetings that are important for the content of the section "Materiality assessment".
  - Interviewing relevant staff responsible for providing the information for, carrying out controls on, and consolidating the data in the section "Materiality assessment".
  - Obtaining assurance evidence that the section "Materiality assessment" reconciles with underlying records of the Company.
  - Evaluating relevant internal and external documentation, on a sample basis, to determine the reliability of the information in the section "Materiality assessment".
  - Evaluating the data and trends.
- Evaluating whether the section "Materiality assessment" is presented and disclosed free from material misstatement in accordance with the criteria applied.

We communicate with the Supervisory Board regarding, among other matters, the planned scope and timing of the assurance engagement and significant findings, including any significant findings in internal control that we identify during our assurance engagement.

Other Information

Preference shares

At December 31, 2023, the Company's authorized capital consisted of 160,000,000 ordinary shares, nominal value € 0.01 per share, and 160,000,000 preference shares, nominal value € 0.01 per share.

No preference shares were outstanding at December 31, 2023.

In April 2000, the foundation "Stichting Continuïteit BE Semiconductor Industries" (the "Foundation") was established. The Foundation is an independent legal entity and is not owned or controlled by any other legal person. The purpose of the Foundation is to safeguard the interests of the Company, the enterprise connected therewith and all the parties having an interest therein and to exclude as much as possible influences which could threaten, among other things, the Company's continuity, independence and identity. The aim of the preference shares is, amongst other things, to provide a protective measure against unfriendly take-over bids and other possible unsolicited influences that could threaten the Company's continuity, independence and identity, including, but not limited to, a proposed resolution to dismiss the Supervisory Board or the Board of Management. The issue of preference shares would enable the Company to consider its position in the then-existing circumstances.

By agreement of May 19, 2008 between the Company and the Foundation, which replaced a similar agreement dated April 19, 2002, the Foundation has been granted a call option pursuant to which it may purchase a number of preference shares up to a maximum of the number of outstanding ordinary shares at the time of exercise of the option minus one.

The Company has also granted to the Foundation the right to file an application for an inquiry into the policy and conduct of the business of the Company with the Enterprise Chamber of the Amsterdam Court of Appeal *("Ondernemingskamer")*. The Company believes that this may be a useful option in the period before the issuance of preference shares, without causing a dilution of the rights of other shareholders at that stage.

The members of the board of the Foundation are W.L.J. Bröcker (Chairman), J.N. de Blécourt, D.J. Dunn, F.J. van Hout and T. de Waard. Except for Mr De Waard and Mr Dunn who are former Supervisory Board members, none of the other members of the board of the Foundation are connected to the Company. The Foundation therefore qualifies as an independent legal entity within the meaning of section 5:71 paragraph 1 sub c of the Dutch Financial Supervision Act *("Wet op het financieel toezicht")*.

Appropriation of the result

The Articles of Association provide that the Company can only distribute profits from its free distributable reserves. The Board of Management, with the approval of the Supervisory Board, will propose to the Annual General Meeting of Shareholders to determine the total dividend over 2023 at € 2.15 per ordinary share, amounting to a total of € 165.6 million. The Board of Management proposes to allocate the part of the net income for the year 2023 remaining after payment of the dividend to the retained earnings. The Supervisory Board has approved this proposal.

The General Meeting of Shareholders approved the 2022 statutory financial statements on April 26, 2023.

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