

# Environmental, Social and Governance Report 2023



# 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
<b>1. Environmental Impact</b> 	<ol style="list-style-type: none"> <li>1. Energy use and renewable energy</li> <li>2. Carbon emissions</li> <li>3. Sustainable design</li> <li>4. Waste and hazardous waste disposal</li> <li>5. Water use</li> </ol>	<ol style="list-style-type: none"> <li>1. { Sustainable design Energy use and renewable energy Waste and hazardous waste disposal</li> <li>4. Carbon emissions</li> <li>5. Water use</li> </ol>	<ol style="list-style-type: none"> <li>1. Waste and hazardous waste disposal</li> <li>2. Carbon emissions</li> <li>3. Energy use and renewable energy</li> <li>4. Sustainable design</li> <li>5. Water use</li> </ol>
<b>2. People Wellbeing</b> 	<ol style="list-style-type: none"> <li>1. Employee health and safety</li> <li>2. Employee engagement</li> <li>3. Diversity and inclusion</li> </ol>	<ol style="list-style-type: none"> <li>1. Employee health and safety</li> <li>2. Diversity and inclusion</li> <li>3. Employee engagement</li> </ol>	<ol style="list-style-type: none"> <li>1. Employee health and safety</li> <li>2. Employee engagement</li> <li>3. Diversity and inclusion</li> </ol>
<b>3. Responsible Business</b> 	<ol style="list-style-type: none"> <li>1. Ethics and compliance</li> <li>2. Responsible supply chain</li> <li>3. Community impact</li> <li>4. Tax practices</li> </ol>	<ol style="list-style-type: none"> <li>1. Ethics and compliance</li> <li>2. Responsible supply chain</li> <li>3. Tax practices</li> <li>4. Community impact</li> </ol>	<ol style="list-style-type: none"> <li>1. Ethics and compliance</li> <li>2. Responsible supply chain</li> <li>3. Community impact</li> <li>4. Tax practices</li> </ol>

## Strategic pillars












## Material topics

● Priority focus area

## 2024 targets\*

## 2030 targets\*

## Relevant SDGs

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

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

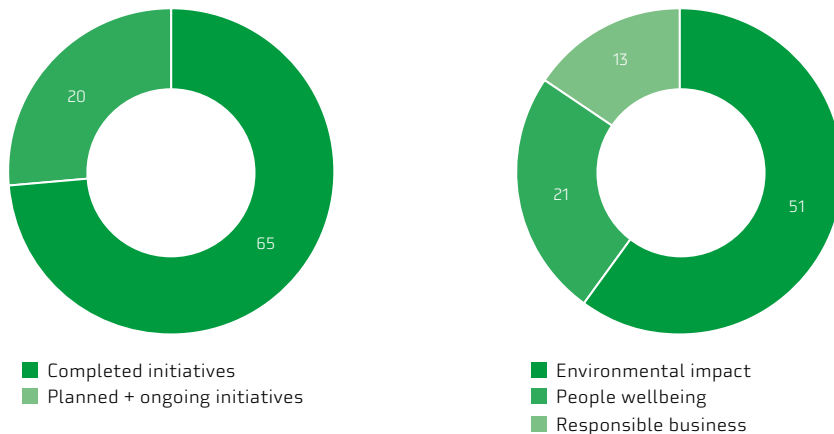
## ESG Strategy

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 Mecco facility.
  - Installation of smart meters at Mecco 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<sub>2</sub> 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](http://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<sup>1</sup> 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").

<sup>1</sup> 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<sup>2</sup>. 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.

<sup>2</sup> 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
	'BBB'	'A' ↑	'AA' ↑	Second highest possible MSCI ESG rating
	17.8	15.6 ↑	14.4 ↑	12 <sup>th</sup> out of 342 semiconductor related companies
	C-	C- ↑	C ↑	Top 10% of industry
	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.







### 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	<ul style="list-style-type: none"> <li>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.</li> </ul>
Communication	5G cellular networks	<ul style="list-style-type: none"> <li>Our advanced SiP technologies allow for faster, more secure, more efficient and higher bandwidth transmission and reception in 5G advanced cellular networks.</li> </ul>
More efficient high-end computing	Data centers Mobile Phones Edge/AI Phones Gaming Autonomous driving	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Our system development for the assembly of integrated photonics and co-packaged optics can reduce power consumption in data centers.</li> </ul>
Less waste	General	<ul style="list-style-type: none"> <li>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.</li> <li>Our wafer level systems also facilitate the usage of chiplets in device architectures which also can significantly reduce material consumption.</li> <li>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.</li> </ul>
Circular economy	General	<ul style="list-style-type: none"> <li>We offer upgrades, retrofits and conversion kits to customers to extend the useful lives of our systems.</li> <li>Some of our equipment has been running at customer sites for more than ten years.</li> <li>Some customers sell our equipment to third parties in the secondary market further extending the useful lives of our systems.</li> <li>We reduce the energy consumption of our systems with comparable output by optimizing process cycles and component selection.</li> <li>We work with scientific institutes to further optimize our systems' material and energy usage and increase their recycling potential.</li> <li>We reduce transport-based emissions via local manufacturing and the usage of alternative freight methods.</li> <li>We re-use packaging in our operations to reduce waste and enhance sustainability.</li> </ul>

### 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](http://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	<ul style="list-style-type: none"> <li>Shareholders expect Besi to protect their investment and provide a competitive return on capital while operating responsibly as a corporate citizen.</li> <li>Both existing and new investors have shown increased interest in ESG and have specific ESG criteria with which to evaluate Besi’s performance.</li> </ul>	<ul style="list-style-type: none"> <li>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”).</li> <li>We maintain close contact with investors in Europe, North America and Asia.</li> <li>We conduct regular meetings with investment professionals and encourage them to ask questions during our earnings calls, meetings, conferences and at our AGM.</li> <li>We engage in important face-to-face dialogue and receive valuable feedback about our business and ESG topics.</li> <li>We posted a formal ESG policy on our website to better inform shareholders and analysts as to Besi’s material topics and activities.</li> </ul>
Suppliers	<ul style="list-style-type: none"> <li>Maintaining a responsible supply chain is an important part of our Responsible Business pillar.</li> <li>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.</li> <li>We seek to build long-term, mutually beneficial relationships with our suppliers.</li> <li>We are expanding our efforts to ensure that all suppliers can match Besi’s own environmental and ethical standards.</li> </ul>	<ul style="list-style-type: none"> <li>We engage with suppliers through direct dialogue, site visits and audits.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>We have begun engagement with suppliers as to the origin of their imported steel and iron supplies due to new EU restrictions.</li> </ul>

Stakeholder group	Why we engage	How we engage
Customers	<ul style="list-style-type: none"> <li>• Building strong relationships is important to attract customers and to our revenue growth.</li> <li>• Providing superior customer support is critical to maintaining strong relationships.</li> <li>• Besi's customers increasingly seek products that are sustainable, environmentally friendly and ethically produced.</li> <li>• Our ESG strategy is formulated with sustainable design as a key component.</li> </ul>	<ul style="list-style-type: none"> <li>• Customer satisfaction is an important measure to gauge customer fulfilment.</li> <li>• 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.</li> <li>• We conduct annual customer satisfaction surveys to assess existing relationships and identify areas for improvement.</li> <li>• 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.</li> <li>• We engage with customers to ensure that our products meet their environmental and social standards.</li> <li>• 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.</li> </ul>
Employees	<ul style="list-style-type: none"> <li>• Besi considers satisfied and engaged employees as a key ingredient for its successful growth.</li> <li>• Employees expect Besi to have high social and ethical standards in the conduct of its business.</li> <li>• Employees also expect us to provide them with equal treatment and opportunities, safe working conditions and career development potential.</li> <li>• Our ESG performance and engagement will become increasingly important in attracting and retaining talent.</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Employee interests are also communicated in a more institutional way via local European Works Council representations.</li> <li>• We conduct Town Hall meetings for all employees on a quarterly basis to inform them as to current business and financial developments.</li> <li>• We have launched ESG resource pages in certain locations to educate and engage our employees about Besi's ESG strategy and progress.</li> <li>• We conduct bi-annual employee engagement surveys. Our most recent 2023 survey reported a high level of participation (94%) and engagement (89%).</li> </ul>
Local communities, governments and society	<ul style="list-style-type: none"> <li>• Besi relies on the health, wellbeing and stability of local communities in the regions where we operate.</li> <li>• We aim to have a positive impact on communities through good corporate and employee conduct.</li> <li>• Society expects Besi to respect national and international laws and regulations, positively impact local communities and provide transparency on economic, environmental and social topics.</li> </ul>	<ul style="list-style-type: none"> <li>• Besi invests in many community projects, particularly in Asia.</li> <li>• 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.</li> <li>• We abide by appropriate social, ethical and environmental standards in our operations.</li> <li>• We meet or exceed minimum legal and regulatory compliance levels.</li> <li>• We engage in responsible tax practices.</li> <li>• We pay our fair share of taxation in all jurisdictions in which we have operations.</li> <li>• Local governments expect compliance with local laws, regulations and care for the health, safety and security of their communities.</li> <li>• Many countries pay close attention to ESG topics in light of increased concern over serious environmental issues.</li> <li>• We use international social and ethical standards wherever possible in all our operations.</li> <li>• We participate in dialogue with local chambers of commerce as appropriate.</li> <li>• We do not participate in lobbying activities or make political contributions.</li> </ul>

## 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	<ul style="list-style-type: none"> <li>Fuel consumption intensity increased by 10% but declined on an absolute basis (14%).</li> <li>Electricity consumption intensity increased by 48% and an increase of 21% on an absolute basis.</li> <li>100% renewable energy achieved at European operations which was comparable to 2022.</li> <li>Renewable energy utilized globally declined from 76% to 71%.</li> <li>Reporting against TCFD framework continued with relevant disclosures wherever possible.</li> </ul> <p>Projects realized:</p> <ul style="list-style-type: none"> <li>Purchase of renewable electricity at new Glenmarie, Malaysia site.</li> <li>Expansion of existing solar PV system and installation of groundwater heat pump to replace gas usage at Besi Austria.</li> <li>Increased lighting energy efficiency at Besi Netherlands.</li> <li>Expansion of LED lighting system at Besi Switzerland.</li> <li>Installation of smart meters at Mecos facility in the Netherlands.</li> </ul>	<ul style="list-style-type: none"> <li>Fuel consumption: Fuel intensity of 3.2 Kwh/€million revenue was roughly equal to 2021.</li> <li>Electricity consumption: Electricity intensity increased to 34 Kwh/€million revenue versus 21 Kwh/€million revenue in 2021 (+62%).</li> <li>Renewable energy in Europe increased to 100% versus 92% in 2021.</li> <li>Renewable energy utilized globally increased to 71% in 2023 versus 20% in 2021.</li> </ul>	<ul style="list-style-type: none"> <li>15% reduction in fuel consumption intensity.</li> <li>11% increase in energy consumption intensity due to increased cleanroom requirements.</li> <li>75% renewable energy utilized globally.</li> </ul>

Material topic	2023 progress update versus 2022	2023 progress update versus 2021 base year	2024 target versus 2021 base year
Carbon emissions	<ul style="list-style-type: none"> <li>Scope 1 &amp; 2 emissions intensity increased from 5.2 to 8.9 tCO<sub>2</sub>/€million revenue (+71%).</li> <li>Absolute Scope 1 &amp; 2 emissions increased from 3,755 to 5,124 tCO<sub>2</sub> (+36%).</li> <li>Scope 3 emissions intensity increased from 13.6 to 17.0 tCO<sub>2</sub>e/€million revenue (+25%).</li> <li>Absolute Scope 3 emissions roughly equal: from 9,817 tCO<sub>2</sub>e to 9,843 tCO<sub>2</sub>e.</li> </ul> <p>Projects realized:</p> <ul style="list-style-type: none"> <li>Increased utilization of renewable energy in our Malaysian facilities.</li> <li>EV vehicles purchased in China to replace petrol-based ICE vehicles.</li> <li>Reduced shipments from Besi Netherlands to Besi APac to once a week versus twice per week.</li> </ul>	<ul style="list-style-type: none"> <li>Scope 1 &amp; 2 emissions intensity of 8.9 tCO<sub>2</sub>/€million revenue decreased versus 14.4 tCO<sub>2</sub>/€million revenue in 2021 (-38%) mainly as a result of the accelerated implementation of renewable energy usage in Asia.</li> <li>Absolute Scope 1 &amp; 2 emissions reduced from 10,812 tCO<sub>2</sub> in 2021 to 5,124 tCO<sub>2</sub> (-53%).</li> <li>Scope 3 emissions intensity rose from 15.9 tCO<sub>2</sub>e/€million revenue in 2021 to 17.0 tCO<sub>2</sub>e/€million revenue (+7%).</li> <li>Absolute Scope 3 emissions declined reduced from 11,942 tCO<sub>2</sub>e in 2021 to 9,843 tCO<sub>2</sub>e (18% reduction).</li> </ul>	<ul style="list-style-type: none"> <li>62% reduction in Scope 1 &amp; 2 carbon emissions intensity.</li> <li>12% reduction in Scope 3 carbon emissions intensity.</li> </ul>
Waste and hazardous waste disposal	<ul style="list-style-type: none"> <li>Total waste intensity increased from 319 to 430 kg/€million revenue (+35%) due to completion of cleanroom facilities in Singapore and Malaysia.</li> <li>Absolute total waste disposal increased by 8% mainly due to scrapping activities in Besi APac and Besi Austria.</li> <li>Hazardous waste decreased by 8% in absolute terms.</li> <li>Reduced paper waste at Besi Netherlands through sustainable procurement initiative with 70% of total waste now recycled at this site.</li> </ul>	<ul style="list-style-type: none"> <li>Total waste intensity of 430 kg/€million revenue increased versus 316 kg/€million revenue (+36%).</li> <li>Absolute total waste increased by 5%.</li> <li>Absolute hazardous waste decreased by 33%.</li> </ul>	<ul style="list-style-type: none"> <li>15% reduction in total waste intensity.</li> <li>20% reduction in hazardous waste.</li> </ul>
Water withdrawal	<ul style="list-style-type: none"> <li>Water withdrawal intensity increased from 46 to 51 m<sup>3</sup>/€million revenue (+11%).</li> <li>Absolute water withdrawal decreased by 9%.</li> <li>Use of centrifuge at China facility to increase water recycling.</li> </ul>	<ul style="list-style-type: none"> <li>Water intensity of 51 m<sup>3</sup>/€million revenue increased by 24% versus 41 m<sup>3</sup>/€million revenue in 2021.</li> <li>Absolute water withdrawal decreased by 3%.</li> </ul>	<ul style="list-style-type: none"> <li>2% reduction in water withdrawal intensity.</li> </ul>
Sustainable design	<ul style="list-style-type: none"> <li>Projects underway to analyze product lifecycles in multiple product groups.</li> <li>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.</li> <li>Launch of Design-to-X initiative to incorporate a Design-to-Cost and Design-to-Sustainability philosophy in product design.</li> </ul>	<ul style="list-style-type: none"> <li>Roadmaps, priorities and initiatives developed for sustainable system design in accordance with targets.</li> </ul>	<ul style="list-style-type: none"> <li>Develop additional targets for sustainable system design.</li> </ul>

### SDG alignment

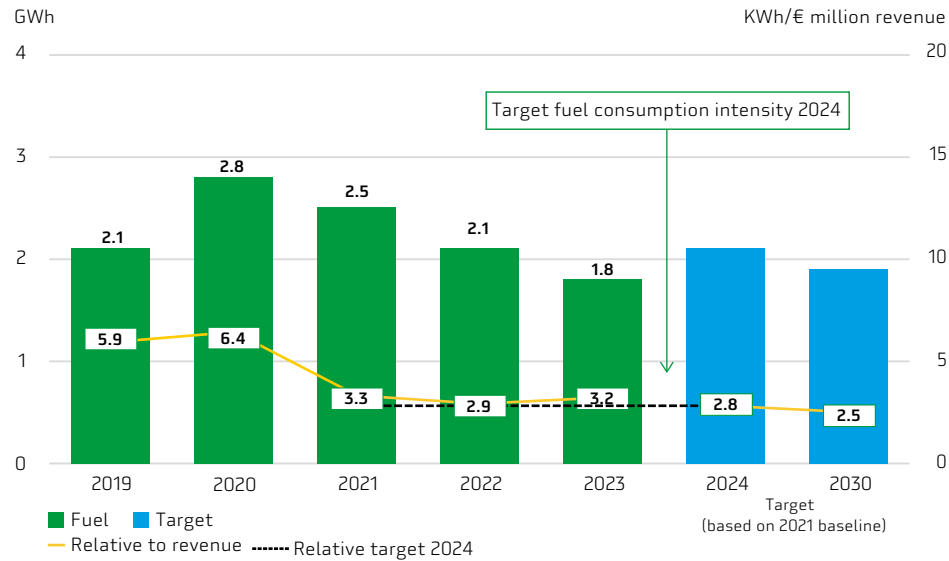
The following SDGs align with the Environmental Impact pillar of Besi's ESG strategy:

Goal/description	How we contribute
 <p>Ensure access to affordable, reliable, sustainable and modern energy for all.</p>	<p>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%.</p>
 <p>Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.</p>	<p>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.</p>
 <p>Ensure sustainable consumption and production patterns.</p>	<p>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.</p>
 <p>Take urgent action to combat climate change and its impacts.</p>	<p>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 &amp; 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.</p>

Energy use and renewable energy

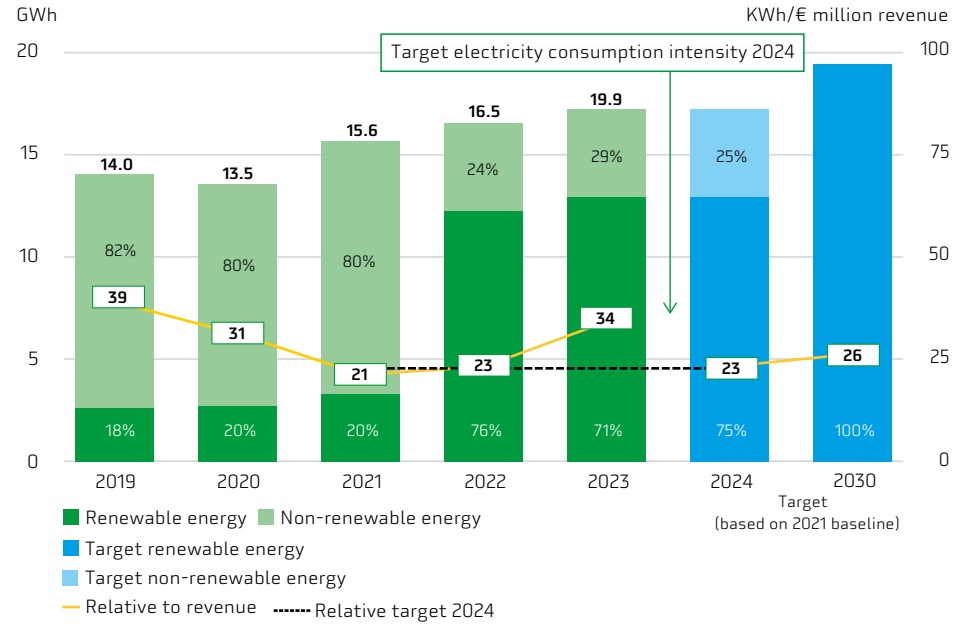
We seek to decrease our energy usage via a reduction of fuel and electricity consumption and increased utilization of renewable energy sources.

**FUEL CONSUMPTION**



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.

**ELECTRICITY CONSUMPTION**



**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 50,000m<sup>3</sup>, or approximately 100 tCO<sub>2</sub> 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.

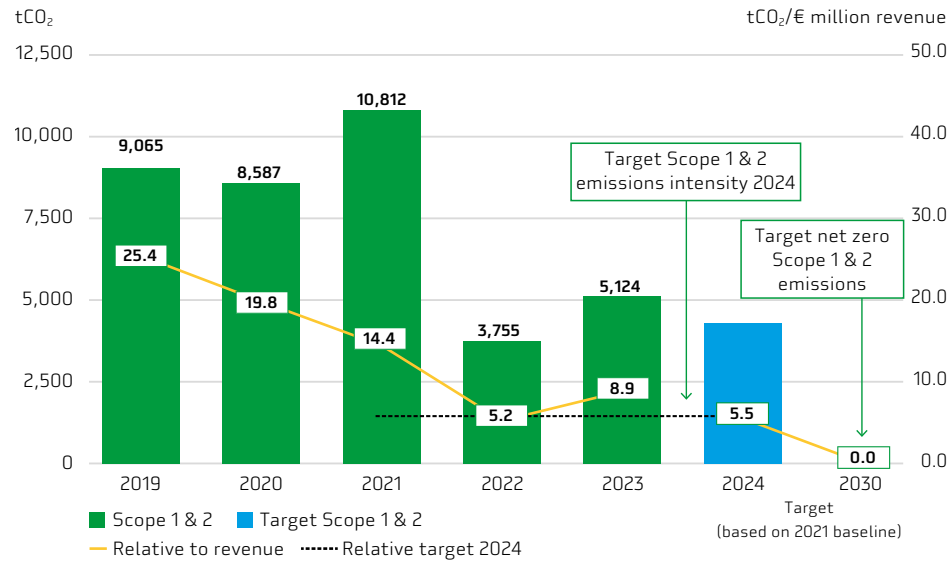
In addition, both Besi's Scope 1 & 2 and Scope 3 emissions intensity increased in 2023 relative to 2022 due primarily to the significant downturn experienced in the semiconductor assembly equipment industry which caused our revenue to decline by 20% year over year. However, Besi has reduced its Scope 1 & 2 emissions intensity versus the 2021 baseline by 5.5 tCO<sub>2</sub>e 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<sub>2</sub>e, 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<sub>2</sub>e emissions/€million revenue, a 7% increase versus the 2021 baseline.

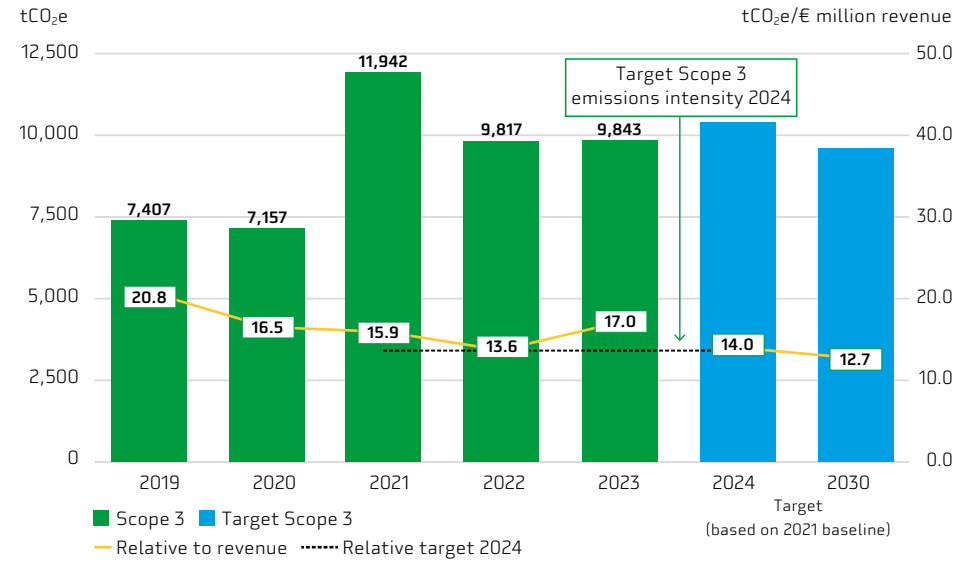
### Installation of solar power reduced energy usage at Besi Austria

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\*

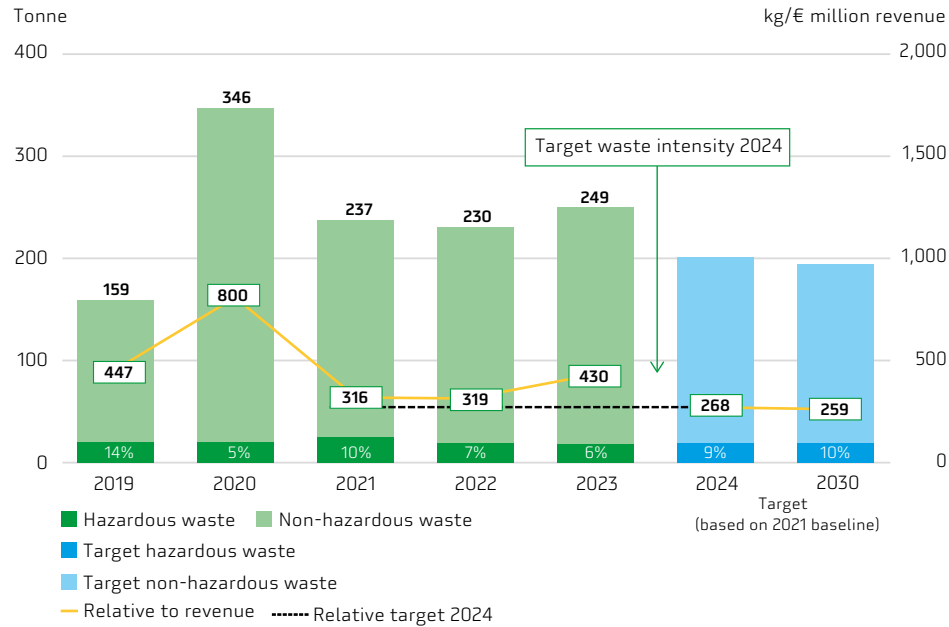


\* Besi expanded the categories included in its Scope 3 emissions measurement for 2022. Therefore, Scope 3 emissions data for the years 2019 – 2021 are not fully comparable.

### 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



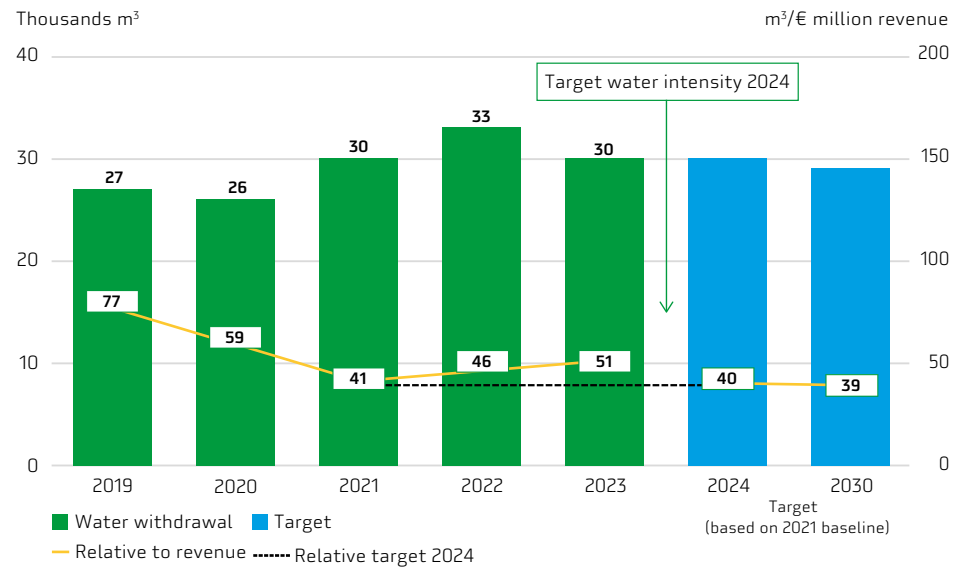
#### Water withdrawal

Water 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

### WATER WITHDRAWAL



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.

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.

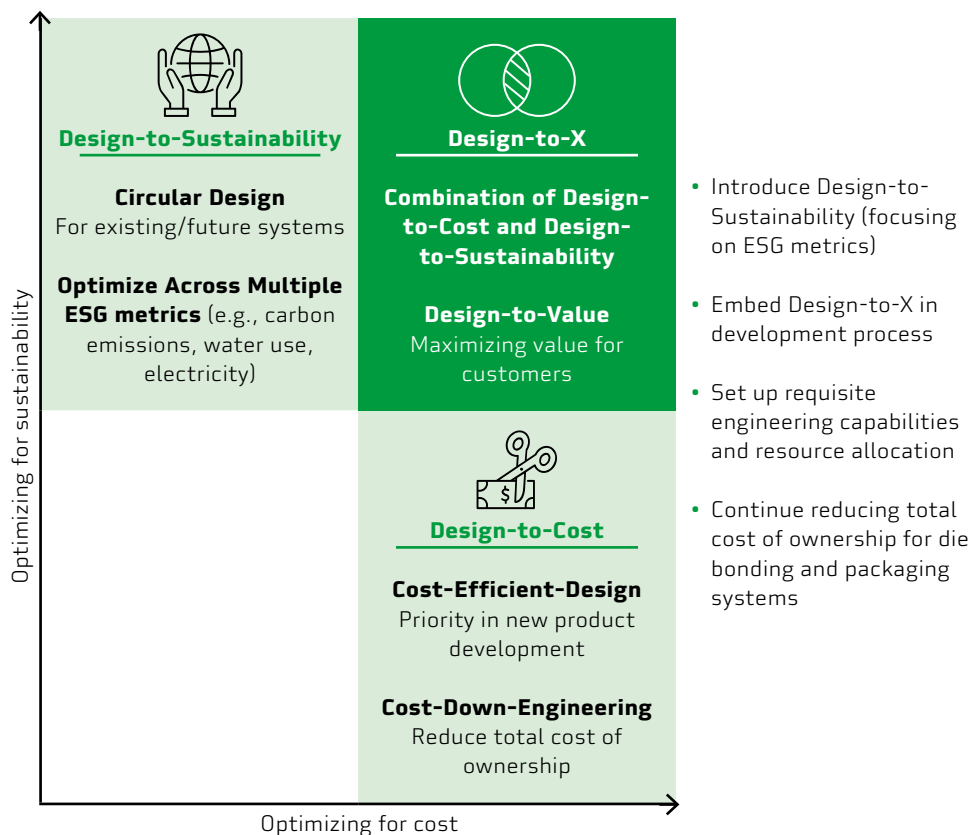
Besi's systems can also be customized, reconfigured and redeployed over their product lifespan thus extending their useful life as well as reducing their environmental impact and raw material consumption. Customer utilization of our extensive global network of field service and spare parts also helps 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	<ul style="list-style-type: none"> <li>Female employees as % of total employees was equal to 2022 (17%).</li> <li>Female managers as % of total managers decreased from 20% in 2022 to 17% in 2023.</li> <li>Local managers as % of total managers was equal to 2022 (88%).</li> <li>Implemented Diversity and Inclusion policy.</li> </ul>	<ul style="list-style-type: none"> <li>17% female employees as % of total employees, equal to 2021.</li> <li>Female managers as % of total managers decreased from 18% in 2021 to 17% in 2023.</li> <li>Local managers as % of total managers increased from 87% in 2021 to 88% in 2023.</li> </ul>	<ul style="list-style-type: none"> <li>Increase % of female employees as % of total employees to &gt;19%.</li> <li>Increase % of female employees in management to &gt;21%.</li> <li>Maintain % of local nationals in management &gt;86%.</li> </ul>
Health and safety	<ul style="list-style-type: none"> <li>Reported incidents declined to three versus six in 2022.</li> <li>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.</li> <li>Six out of seven Besi facilities (Austria, China, Malaysia, Singapore, Switzerland and our Mecos facility in the Netherlands) are now ISO 45001 compliant.</li> </ul>	<ul style="list-style-type: none"> <li>Incidents reported decreased to three versus five in 2021.</li> </ul>	<ul style="list-style-type: none"> <li>Achieve safety incident record of zero.</li> </ul>
Employee engagement and career development	<ul style="list-style-type: none"> <li>31 average training hours per employee, equal to 2022.</li> <li>Bi-annual employee engagement survey conducted by Willis Towers Watson.</li> <li>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.</li> <li>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.</li> <li>Survey results will be used to improve areas of under-performance both company-wide and at facility-levels.</li> <li>Sustainable design training conducted in Austria and Switzerland to help engineers promote sustainable design in next generation product development.</li> <li>Quarterly Town Hall meetings for all employees conducted to share business progress.</li> <li>Employee turnover reduced from 11% in 2022 to 7% in 2023.</li> </ul>	<ul style="list-style-type: none"> <li>2023 employee engagement survey indicated high level of participation (94%) and engagement (89%).</li> <li>Besi scored above the high-tech norm in six of seven categories in the 2023 survey.</li> <li>Average training hours per employee increased to 31 hours, up 19% versus 2021.</li> </ul>	<ul style="list-style-type: none"> <li>Maintain employee engagement &gt;85%.</li> <li>Remain above high-tech benchmark.</li> <li>Maintain investment in employee training &gt;21 working hours per employee per year.</li> </ul>

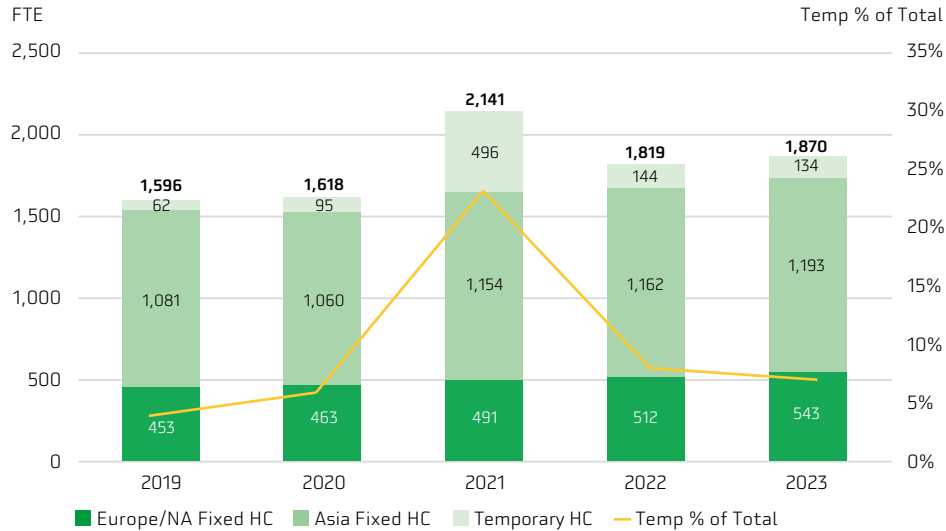
### SDG alignment

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

Goal/description	How we contribute
 <p>Ensure healthy lives and promote well-being for all at all ages.</p>	<p>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.</p>
 <p>Achieve gender equality and empower all women and girls.</p>	<p>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.</p>
 <p>Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.</p>	<p>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.</p>

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



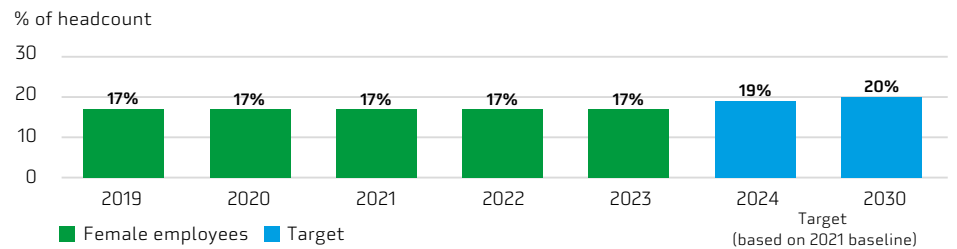
Topic	2019	2020	2021	2022	2023
Employee turnover	16%	7%	10%	11%	7%
New hires	6%	8%	19%	11%	10%

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.

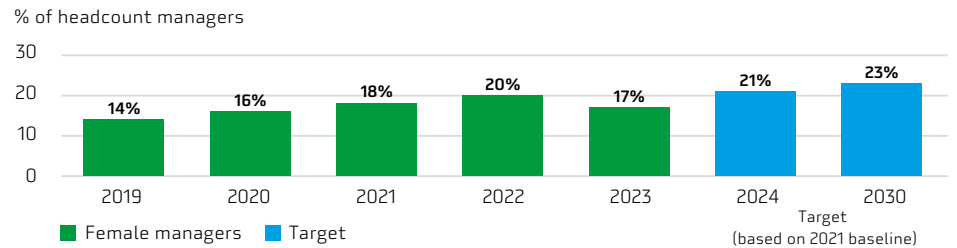
### Diversity and inclusion

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.

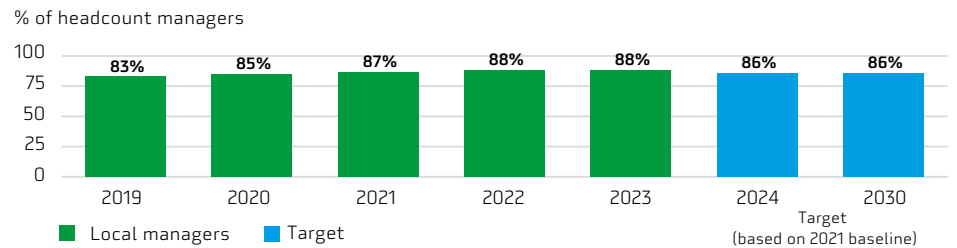
### FEMALE EMPLOYEES



### FEMALE MANAGERS



### LOCAL 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

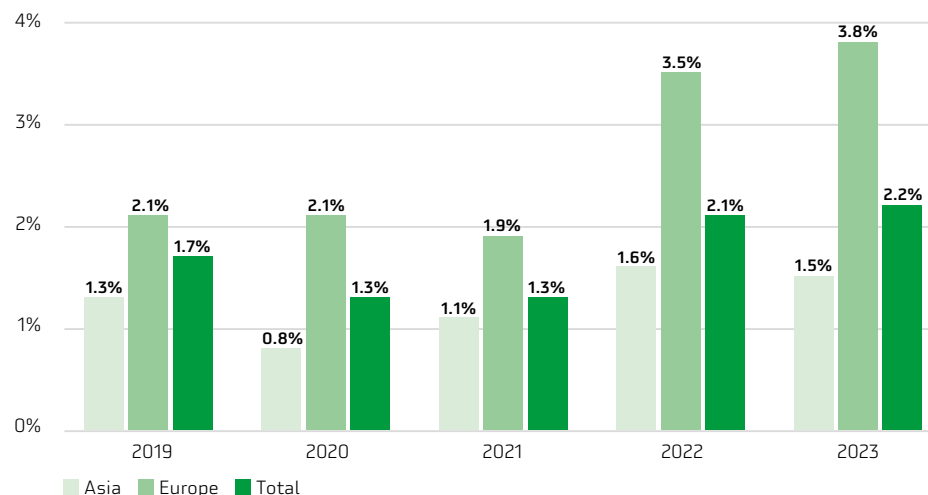
On November 9, 2023, Besi Switzerland participated in National Future Day 2023 which provides schoolchildren insight into gender atypical professions. The objective was to provide schoolchildren with the courage and confidence to take charge of their future outside of gender images. As engineering tends 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 Mecco 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 Mecco 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

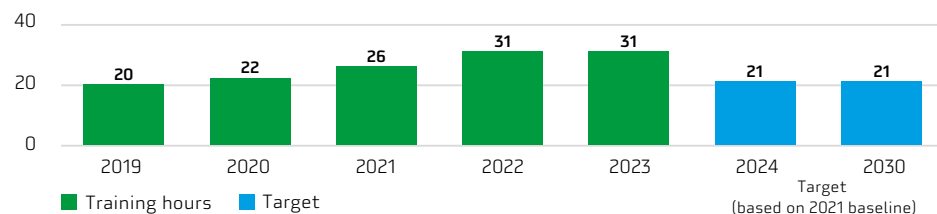
Work began at our Besi Leshan facility to optimize safe working conditions for employees. The facility received ISO 45001 certification in 2023 which represents further external validation of Besi's commitment to occupational health and safety management.

### 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

Hours/employee



## 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
<b>Ethics and compliance</b>	<ul style="list-style-type: none"> <li>• No reported violations of Besi's Code of Conduct.</li> <li>• Training provided to all new employees.</li> </ul>	<ul style="list-style-type: none"> <li>• No reported violations of Besi's Code of Conduct.</li> <li>• Training provided to all new employees.</li> </ul>	<ul style="list-style-type: none"> <li>• Increase employee training participation as it relates to Besi's Code of Conduct.</li> </ul>
<b>Responsible supply chain</b>	<ul style="list-style-type: none"> <li>• % of Purchase Volume ("PV") to sign General Work Agreement ("GWA") or General Procurement Contract ("GPC") decreased slightly to 76% versus 77%.</li> <li>• % of PV to sign Conflict Free Sourcing Initiative ("CFSI") signatories decreased to 71% versus 73%.</li> <li>• % of PV compliant with RoHS directive slightly decreased to 93% versus 94%.</li> <li>• % of PV to sign Self-Assessment Questionnaire ("SAQ") as to our Code of Conduct increased to 66% versus 62%.</li> <li>• % of PV audited was 63%, equal to 2022.</li> </ul>	<ul style="list-style-type: none"> <li>• % of Purchase Volume ("PV") to sign General Work Agreement ("GWA") or General Procurement Contract ("GPC") increased to 76% versus 64%.</li> <li>• % of PV to sign CFSI increased to 71% versus 66%.</li> <li>• % of PV compliant with RoHS directive slightly decreased to 93% versus 94%.</li> <li>• % of PV to sign Self-Assessment Questionnaire ("SAQ") as to our Code of Conduct increased to 66% versus 63%.</li> <li>• % of PV audited increased to 63% versus 59%.</li> </ul>	<ul style="list-style-type: none"> <li>• 77% of PV to sign GWA or GPC.</li> <li>• 73% of PV to sign CFSI.</li> <li>• 75% of PV to sign SAQ as to our Code of Conduct.</li> <li>• 70% of PV audited.</li> </ul>
<b>Community impact</b>	<ul style="list-style-type: none"> <li>• Supported various local charities within the regions we operate.</li> <li>• Supported local technical schools through donations of employee time.</li> <li>• Volunteered employee hours to local initiatives.</li> </ul>	<ul style="list-style-type: none"> <li>• 35 employees at our Mecor facility in the Netherlands generated € 4,375 in social value in the number of hours volunteered.</li> <li>• Besi Netherlands donated € 7,740 to "Stichting Kinderen van de Voedselbank".</li> <li>• Besi Leshan provided local schools with 600 hours of community support and donated ¥ 10,000 RMB to a local charity.</li> </ul>	<ul style="list-style-type: none"> <li>• Report on Besi hours volunteered, monetary donations and education projects supported.</li> </ul>
<b>Tax practices</b>	<ul style="list-style-type: none"> <li>• Compliant with tax obligations where factual economic activities take place.</li> </ul>	<ul style="list-style-type: none"> <li>• Compliant with tax obligations where factual economic activities take place.</li> </ul>	<ul style="list-style-type: none"> <li>• Compliant with tax obligations where factual economic activities take place.</li> </ul>

### SDG alignment

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

Goal/description	How we contribute
 <p>Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.</p>	<p>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.</p>

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.

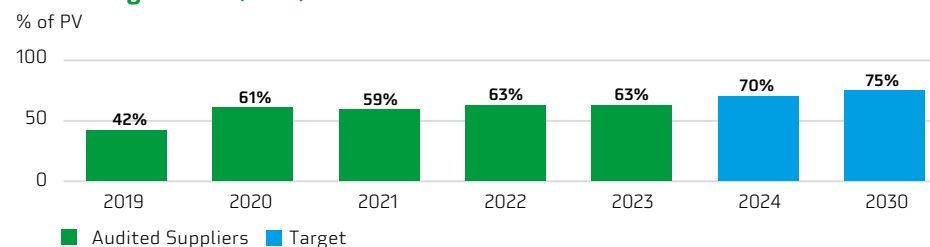
In 2023, 88 suppliers were responsible for approximately 80% of Besi's total purchasing volume. As a result, we established a risk map matrix to assess the importance, reliability, financial condition and sustainability of all suppliers on a more regular basis. Besi evaluates suppliers by means of its 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.

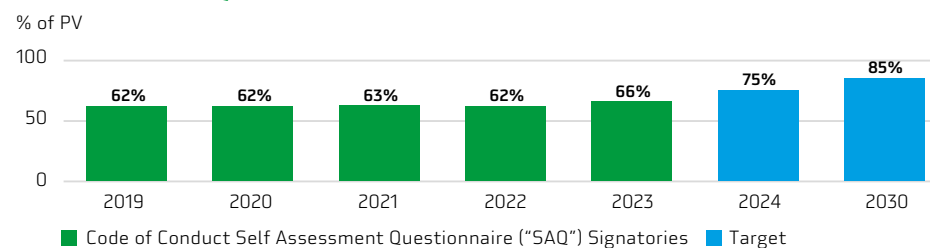
Finally, the percentage of purchasing volume which answered the RBA Code of Conduct Self-Assessment increased from 62% in 2022 to 66% in 2023 marking further progress in our supply chain engagement with Besi's ESG activities.

## SUPPLY CHAIN

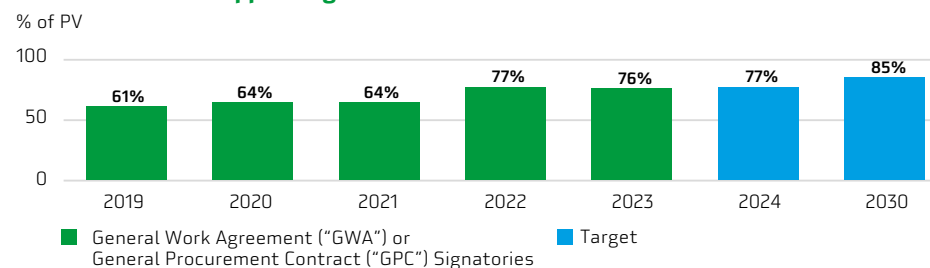
### Purchasing Volume ("PV") Audited



### Self Assessment Questionnaire

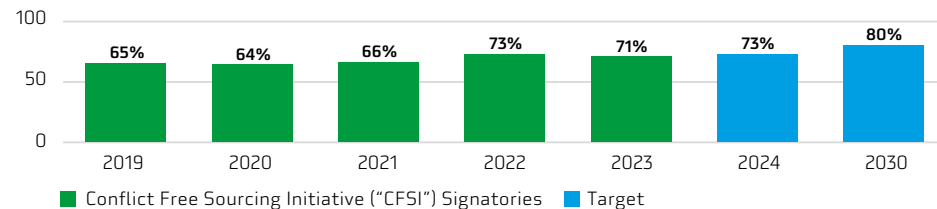


### Code of Conduct Supplier Agreements



### 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 Mecco 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-term 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.

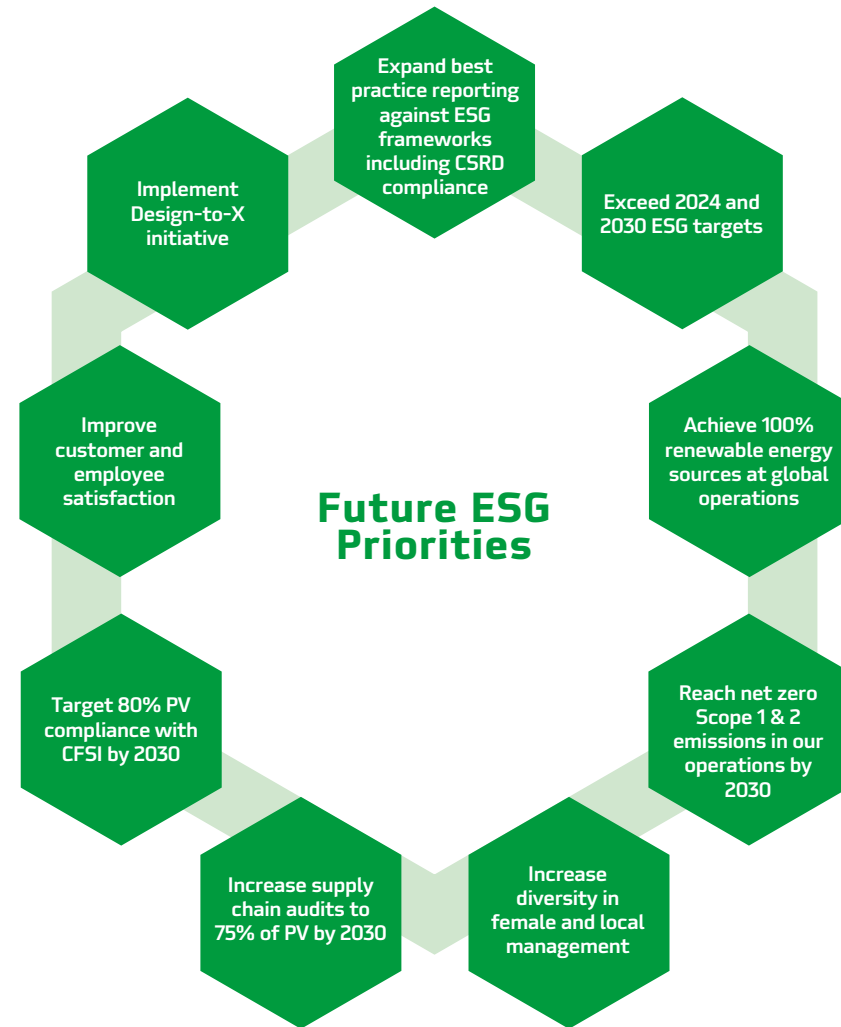
#### Future Responsible Business priorities

- 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:



## Appendices to the Environmental, Social and Governance Report 2023

Annex 1: SASB Reference Table 2023	<b>34</b>
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## Annex 1: SASB Reference Table 2023

### Sustainability Accounting Standards Board (SASB) Alignment

Topic	Accounting Metrics	Code	Disclosure	Disclosure Location
Greenhouse Gas Emissions	(1) Gross global Scope 1 emissions and (2) Amount of total emissions from perfluorinated compounds	TC-SC-110a.1	(1) Scope 1: 208 Metric Tonnes CO <sub>2</sub> e. (2) Besi doesn't have emissions from perfluorinated compounds.	ESG Report 2023, Annex 4: Taskforce on Climate-related Financial Disclosures
Greenhouse Gas Emissions	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	TC-SC-110a.2	Reducing Besi's carbon footprint is a key focus of Besi's ESG strategy. Our ambition is to reduce carbon emissions intensity (carbon emissions/revenue) across all three reporting scopes. Besi has reduced its direct emissions (Scope 1 & 2) intensity by 40% compared to the base year 2021. We set target to be carbon neutral for Scope 1 & 2 emissions.	Annual Report 2023, page 65 Environmental impact
Energy Management in Manufacturing	(1) Total energy consumed, (2) Percentage grid electricity, and (3) Percentage renewable	TC-SC-130a.1	(1) 21.8 GWh energy consumed. (2) 19.9 GWh grid electricity consumed, 91% of total energy consumption. (3) 71% renewable energy utilized globally.	Annual Report 2023, page 65 Environmental impact
Water Management	(1) Total water withdrawn, and (2) Total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	TC-SC-140a.1	Besi consumed approximately 30 million liters of fresh water in its operations in 2023, of which approximately 90% was utilized in our Asian production operations. Virtually all water used in our operations is discharged back into local water systems. As a result, our net usage is limited. We do not operate in any regions with a high or very highwater risk as defined by the World Resources Institute.	Annual Report 2023, page 65 Environmental impact
Waste Management	(1) Amount of hazardous waste from manufacturing, and (2) Percentage recycled	TC-SC-150a.1	(1) 15.8 tons (2) 19%	Annual Report 2023, page 65 Environmental impact
Employee Health & Safety	Description of efforts to assess, monitor, and reduce exposure of employees to human health hazards	TC-SC-320a.1	Employee health and safety represents material topic for Besi. In our Annual report we disclose how Besi assesses, monitors and reduces exposure of employees to human health hazards.	Annual Report 2023, page 73 People Wellbeing
Employee Health & Safety	Total amount of monetary losses as a result of legal proceedings associated with employee health and safety violations	TC-SC-320a.2	There were no legal proceedings related to health and safety incidents in 2023.	Annual Report 2023, page 73 People wellbeing
Recruiting & Managing a Global & Skilled Workforce	Percentage of employees that are (1) Foreign nationals and (2) Located offshore	TC-SC-330a.1	(1) Besi is a global company with headquarters in Duiven, the Netherlands. We operate 8 facilities in Asia and Europe for production and development activities as well as 13 sales and service offices across Europe, Asia and North America. We employed a total staff of 1,735 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. Based on the foreign nationals per facility we have determined this metric at 12% for Besi as a whole. However, we do not believe that disclosing a single percentage of foreign nationals is a useful metric for our business. We disclose additional metrics, such as local managers and training hours, which in our view are a more effective metrics for assessing this aspect. (2) 1%	N/A

Topic	Accounting Metrics	Code	Disclosure	Disclosure Location
Product Lifecycle Management	Percentage of products by revenue that contain IEC 62474 declarable substances	TC-SC-410a.1	We provide disclosure on our approach to responsible supply chain. We seek to align our operations and supply chain with the Restriction of Hazardous Substances ("RoHS") directive. Further Besi has a Conflicts Minerals Policy in place. We will investigate to start a project for supplier confirmation that the purchased materials do not contain IEC 62474 declarable substances.	Annual Report 2023, page 77 Responsible business
Product Lifecycle Management	Processor energy efficiency at a system-level for: (1) Servers, (2) Desktops, and (3) Laptops	TC-SC-410a.2	Besi does not disclose single percentages for these product categories, given that we are engaged in the development, production, marketing and sales of back-end equipment for the semiconductor industry and not in the actual manufacturing of processors.	N/A
Materials Sourcing	Description of the management of risks associated with the use of critical materials	TC-SC-440a.1	Besi disclose its risk management process in which we have identified the following risk: 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.	Annual Report 2023, page 83 Risk management
IP Protection & Competitive Behavior	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations	TC-SC-520a.1	There were no legal proceedings associated with anti-competitive behavior during 2022 or 2023.	Annual Report 2023, page 77 Responsible business
Total production	The entity shall disclose total production from its own manufacturing facilities and those with which it contracts for manufacturing services. For semiconductor equipment manufacturers the total production shall be reported on a per unit basis. For semiconductor device manufacturers the total production shall be reported consistent with International SEMATECH Manufacturing Initiative's Semiconductor Key Environment Performance Indicators Guidance, Technology Transfer #09125069A-ENG.	TC-SC-000.A	Besi's total production amounted to 859 machines.	N/A
Percentage of production from owned facilities	Percentage of production from owned facilities	TC-SC-000.B	100% of the production is of our own facilities.	N/A

## Annex 2: GRI Reference Table 2023

### GRI content index

<b>Statement of use</b>	BE Semiconductor Industries N.V. has reported the information cited in this GRI content index for the period January 1, 2023 - December 31, 2023 with reference to the GRI Standards.
<b>GRI 1 used</b>	GRI 1: Foundation 2021

In the table below, reference is made to the Annual Report 2023, which can be downloaded at [www.besi.com/investor-relations/financial-reports-and-publications/financial-reports/](http://www.besi.com/investor-relations/financial-reports-and-publications/financial-reports/) Further reference is made to the Code of Conduct, Whistleblower Policy, Supplier Code of Conduct and Global Tax Policy, all available at [www.besi.com/investor-relations/corporate-governance/](http://www.besi.com/investor-relations/corporate-governance/) Annex 1: SASB Reference Table 2023 and Annex Reporting Criteria Material Topics Environmental, Social and Governance are included in the ESG Report 2023, which can be downloaded at [www.besi.com/investor-relations/corporate-governance/](http://www.besi.com/investor-relations/corporate-governance/)

GRI Standard	Disclosure	Location	Section/remarks	Page(s)
GRI 2: General Disclosures 2021	2-1 Organizational details	Annual Report 2023	Corporate Information	198
	2-2 Entities included in the organization's sustainability reporting	Annual Report 2023	Financial Statements - Principles of Consolidation	143 - 144
	2-3 Reporting period, frequency and contact point	Annual Report 2023	The Environmental, Social and Governance Report covering the period January 1, 2023 - December 31, 2023 is included in the Annual Report 2023. For questions on this report, please contact our Investor Relations, for contact details see <a href="https://www.besi.com/investor-relations/">https://www.besi.com/investor-relations/</a>	N/A
	2-4 Restatements of information	Annual Report 2023	Environmental, Social and Governance - Reporting scope	56
	2-5 External assurance	Annual Report 2023	Environmental, Social and Governance - Assurance Report of the Independent Auditor	205
	2-6 Activities, value chain and other business relationships	Annual Report 2023	Company Profile	4 - 5
	2-7 Employees	Annual Report 2023	Key highlights - Headcount data	6
	2-8 Workers who are not employees	Annual Report 2023	Key highlights - Headcount data Workers who are not employees amount to 98 of which 6% relates to production, 71% to research and development, 21% to customer support and 2% to other.	6
	2-9 Governance structure and composition	Annual Report 2023	Corporate Governance	104
	2-10 Nomination and selection of the highest governance body	Annual Report 2023	Environmental, Social and Governance - ESG Governance	56
	2-11 Chair of the highest governance body	Annual Report 2023	Corporate Governance	104
	2-12 Role of the highest governance body in overseeing the management of impacts	Annual Report 2023	Environmental, Social and Governance - ESG Governance	56
	2-13 Delegation of responsibility for managing impacts	Annual Report 2023	Environmental, Social and Governance - ESG Governance	56
	2-14 Role of the highest governance body in sustainability reporting	Annual Report 2023	Environmental, Social and Governance - ESG Governance	56
	2-15 Conflicts of interest	Annual Report 2023	Corporate Governance - Board of Management - Conflicts of Interest Corporate Governance - Supervisory Board - Conflicts of Interest	105 106
	2-16 Communication of critical concerns	Annual Report 2023	Report of the Supervisory Board - Supervisory Board meeting topics	133 - 134

GRI Standard	Disclosure	Location	Section/remarks	Page(s)
	2-17 Collective knowledge of the highest governance body	Annual Report 2023	Board of Management and Supervisory Board Members	137
	2-18 Evaluation of the performance of the highest governance body	Annual Report 2023	Report of the Supervisory Board - Supervisory Board meeting topics	133 - 134
	2-19 Remuneration policies	Annual Report 2023	Remuneration Report - Remuneration structure	115 - 118
	2-20 Process to determine remuneration	Annual Report 2023	Remuneration Report - General	111
	2-21 Annual total compensation ratio	Annual Report 2023	Remuneration Report - Remuneration of the Board of Management	127 - 128
	2-22 Statement on sustainable development strategy	Annual Report 2023 ESG policy	Environmental, Social and Governance - ESG strategy <a href="https://www.besi.com/investor-relations/corporate-governance/">https://www.besi.com/investor-relations/corporate-governance/</a>	55
	2-23 Policy commitments	Annual Report 2023	Environmental, Social and Governance - People Wellbeing & Responsible Business	73, 77
	2-24 Embedding policy commitments	Annual Report 2023	Environmental, Social and Governance - Responsible Business	77 - 80
	2-25 Processes to remediate negative impacts	Annual Report 2023 Code of Conduct Whistleblower procedure Supplier Code of Conduct ESG policy	Annual Report 2023 - Environmental, Social and Governance - Responsible Business - Ethics and compliance  Code of Conduct, Whistleblower procedure, Supplier Code of Conduct, ESG policy	78 - 79
	2-26 Mechanisms for seeking advice and raising concerns	Annual Report 2023 Code of Conduct Whistleblower procedure Supplier Code of Conduct	Annual Report 2023 - Environmental, Social and Governance - Responsible Business - Ethics and compliance  Code of Conduct, Whistleblower procedure and Supplier Code of Conduct	78
	2-27 Compliance with laws and regulations	Annual Report 2023	Annual Report 2023 - Risk Management - Risk appetite / Legal and compliance risks  There were no significant instances of non-compliance with laws and regulations during the reporting period.	85, 96
	2-28 Membership associations	N/A	We do not participate in a significant role in industry associations, other membership associations, and national or international advocacy organizations.	N/A
	2-29 Approach to stakeholder engagement	Annual Report 2023	Environmental, Social and Governance - Our key stakeholders	63 - 64
	2-30 Collective bargaining agreements	Annual Report 2023	23% of our fixed employees is subjected to collective bargaining agreements. For employees not covered by collective bargaining agreements see Environmental, Social and Governance - People Wellbeing	73
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Annual Report 2023	Environmental, Social and Governance - Materiality assessment	52
	3-2 List of material topics	Annual Report 2023	Environmental, Social and Governance - Materiality assessment	53
	3-3 Management of material topics	Annual Report 2023	Environmental, Social and Governance - ESG initiatives Environmental, Social and Governance - ESG governance	55 - 56
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	Annual Report 2023	Financial Statements 2023 - Consolidated Statement of Operations	140
	201-2 Financial implications and other risks and opportunities due to climate change	Annual Report 2023 ESG Report 2023	Risks and Risk Management - Risk factors - Strategic risks Environmental, Social and Governance - TCFD	85, 91, 96 Annex 4

GRI Standard	Disclosure	Location	Section/remarks	Page(s)
	201-3 Defined benefit plan obligations and other retirement plans	Annual Report 2023	Financial Statements 2023 - Notes to the Consolidated Financial Statements - Note 25 Employee benefits	169
	201-4 Financial assistance received from government	N/A	Research and development subsidies and credits available to offset research and development expenses were € 9.6 million in 2023. R&D grants have been received from the EU, from the Österreichische Forschungsförderung-gesellschaft and from local governments.	N/A
GRI 202: Market Presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	Annual Report 2023 Supplier Code of Conduct	Environmental, Social and Governance - Responsible Business - Responsible supply chain Supplier Code of Conduct: Wages and benefits	77 3
	202-2 Proportion of senior management hired from the local community	Annual Report 2023	Environmental, Social and Governance - People Wellbeing - Diversity and Inclusion	75
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	N/A	Infrastructure investments and services supported is not applicable.	N/A
	203-2 Significant indirect economic impacts	N/A	Indirect economic performance is not determined to be a material topic.	N/A
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	Annual Report 2023	Environmental, Social and Governance - Responsible Business - Responsible supply chain 70% of our material related purchasing volume is sourced in Asia.	78 - 80
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	Annual Report 2023	Risks and Risk Management - Risk factors - Operational risks & Legal and Compliance risks	91, 96
	205-2 Communication and training about anti-corruption policies and procedures	Annual Report 2023 Supplier Code of Conduct	Report of the Supervisory Board - Supervisory Board meeting topics Training provided to all new employees, see Environmental, Social and Governance - Responsible business - Ethics and compliance Supplier Code of Conduct, see Environmental, Social and Governance - Responsible business - Responsible supply chain Supplier Code of Conduct: Business Ethics	133 76 - 77 77 - 78 5
	205-3 Confirmed incidents of corruption and actions taken	N/A	No reported incidents of corruption.	N/A
GRI 206: Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Annual Report 2023	Not applicable, in 2023 there were not such legal proceedings. Environmental, Social and Governance - Responsible Business - Ethics and compliance	78
GRI 207: Tax 2019	207-1 Approach to tax	Annual Report 2023 Global Tax Policy	Environmental, Social and Governance - Responsible Business Tax practices Global Tax Policy	80
	207-2 Tax governance, control, and risk management	Annual Report 2023	Environmental, Social and Governance - Responsible Business Tax practices	80
	207-3 Stakeholder engagement and management of concerns related to tax	Annual Report 2023	Environmental, Social and Governance - Responsible Business Tax practices	80

GRI Standard	Disclosure	Location	Section/remarks	Page(s)
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Annual Report 2023	<p>Environmental, Social and Governance - Environmental impact - Energy use and renewable energy.</p> <p>The 2023 fuel consumption of 1.8 GWh consists of:</p> <ul style="list-style-type: none"> <li>• Gas 0.85 GWh (non-renewable)</li> <li>• Gasoline 0.05 GWh (non-renewable)</li> <li>• Diesel 0.1 GWh (non-renewable)</li> <li>• City Heating 0.8 GWh (of which 82% sustainable generated)</li> </ul> <p>Within the 2023 electricity consumption of 19.9, GWh 0.3 GWh relates to purchased cooling.</p> <p>The data on the energy consumption is derived from meter readings and/or invoices from suppliers. In case the energy consumption is included in the rent an estimate is made of Besi's share in the total energy consumption of the building.</p> <p>General available conversion factors are used to convert the energy usage into GWh. For conversion factors see Annex Reporting Criteria Material Topics Environmental, Social and Governance.</p>	65, 68
	302-3 Energy intensity	Annual Report 2023	Environmental, Social and Governance - Environmental impact - Energy use and renewable energy	68
	302-4 Reduction of energy consumption	Annual Report 2023	<p>Environmental, Social and Governance - Environmental impact - Energy use and renewable energy</p> <p>In 2024 we will further investigate the disclosure of the amount of reductions in energy as a direct result of conservation and efficiency initiatives (if applicable).</p>	65, 68
	302-5 Reductions in energy requirements of products and services	Annual Report 2023	Environmental, Social and Governance - Environmental impact - Sustainable design	71 - 72
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	Annual Report 2023	Environmental, Social and Governance - Environmental impact - Water withdrawal	71
	303-3 Water withdrawal	Annual Report 2023	Environmental, Social and Governance - Environmental impact - Water withdrawal 98% of the water withdrawal consists of third-party water and 2% relates to groundwater.	71
	303-4 Water discharge	Annual Report 2023	Environmental, Social and Governance - Environmental impact - Water withdrawal	71
	303-5 Water consumption	Annual Report 2023	Environmental, Social and Governance - Environmental impact - Water withdrawal	71
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Annual Report 2023 ESG Report 2023	<p>Environmental, Social and Governance - Environmental impact - Carbon emissions</p> <p>Scope 1: 208 Metric Tonnes CO<sub>2</sub>e</p> <p>Annex 4: Taskforce on Climate-related Financial Disclosures</p>	66, 70 Annex 4
	305-2 Energy indirect (Scope 2) GHG emissions	Annual Report 2023 ESG Report 2023	<p>Environmental, Social and Governance - Environmental impact - Carbon emissions</p> <p>Scope 2: 4,916 Metric Tonnes CO<sub>2</sub></p> <p>Annex 4: Taskforce on Climate-related Financial Disclosures</p>	66, 70 Annex 4
	305-3 Other indirect (Scope 3) GHG emissions	Annual Report 2023 ESG Report 2023	<p>Environmental, Social and Governance - Environmental impact - Carbon emissions</p> <p>Scope 3: 9,843 Metric Tonnes CO<sub>2</sub>e</p> <p>Annex 4: Taskforce on Climate-related Financial Disclosures</p>	66, 70 Annex 4
	305-4 GHG emissions intensity	Annual Report 2023	Environmental, Social and Governance - Environmental impact - Carbon emissions	66, 70
	305-5 Reduction of GHG emissions	Annual Report 2023	Environmental, Social and Governance - Environmental impact - Environmental impact	66, 70

GRI Standard	Disclosure	Location	Section/remarks	Page(s)
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	Annual Report 2023	Environmental, Social and Governance - Environmental impact - Waste and hazardous waste disposal The disclosed waste related impacts relate to waste generated in Besi's own activities.	65, 71
	306-3 Waste generated	Annual Report 2023	Environmental, Social and Governance - Environmental impact - Waste and hazardous waste disposal	70 - 71
	306-4 Waste diverted from disposal	Annual Report 2023 Annex 1: SASB Reference Table 2023	Environmental, Social and Governance - Environmental impact - Waste and hazardous waste disposal The recycling percentage of hazardous waste amounts to 19%. See also annex 1: SASB Reference Table 2023 for the disclosure of the recycling percentage for hazardous waste. The recycling percentage of non-hazardous waste amounts to 47%.	70 - 71
	306-5 Waste directed to disposal	Annual Report 2023	Environmental, Social and Governance - Environmental impact - Waste and hazardous waste disposal In 2024 it will be investigated if the disclosures on waste disposal can be further detailed with a breakdown of the disposal operations.	70 - 71
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	Annual Report 2023	Environmental, Social and Governance - Responsible Business - Responsible supply chain In 2023 progress was made on ESG-related topics and targets through engagement with suppliers. We set expectations as to the type of ESG information required of them ahead of Besi's annual Supplier Day. Additionally, we began collecting RBA and ESG information as part of the scorecard used in supplier audits. Our initial efforts will focus on CO <sub>2</sub> emissions in Besi's supply chain as part of overall Scope 3 emissions reduction efforts.	77 - 79
	308-2 Negative environmental impacts in the supply chain and actions taken	Annual Report 2023	Environmental, Social and Governance - Responsible Business - Responsible supply chain In 2023 progress was made on ESG-related topics and targets through engagement with suppliers. We set expectations as to the type of ESG information required of them ahead of Besi's annual Supplier Day. Additionally, we began collecting RBA and ESG information as part of the scorecard used in supplier audits. 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. 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.	78 - 79
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Annual Report 2023	Environmental, Social and Governance - People Wellbeing, table new hires and employee turnover	75
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	N/A	There is no distinction made in the benefits between full-time employees and temporary or part-time employees.	N/A

GRI Standard	Disclosure	Location	Section/remarks	Page(s)
GRI 402: Labor/ Management Relations 2016	402-1 Minimum notice periods regarding operational changes	Annual Report 2023	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.	75 - 76
			Risk Management - Risk appetite 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. Besi seeks to comply with all environmental and labor laws and uses its best efforts to comply with best practice standards in the jurisdictions in which Besi operates. For the minimum notice periods regarding operational changes Besi follows local labor laws.	86
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Annual Report 2023	Environmental, Social and Governance - ESG Governance Environmental, Social and Governance - People Wellbeing - Employee health and safety	73, 75, 76
	403-2 Hazard identification, risk assessment, and incident investigation	Annual Report 2023	Environmental, Social and Governance - ESG Governance Environmental, Social and Governance - People Wellbeing - Employee health and safety	56 73, 76
	403-3 Occupational health services	Annual Report 2023	Environmental, Social and Governance - ESG Governance Environmental, Social and Governance - People Wellbeing - Employee health and safety	56 76
	403-4 Worker participation, consultation, and communication on occupational health and safety	Annual Report 2023	Environmental, Social and Governance - ESG Governance Environmental, Social and Governance - People Wellbeing (employee engagement survey)	56 64, 73
	403-5 Worker training on occupational health and safety	Annual Report 2023	Environmental, Social and Governance - ESG Governance	56, 73
	403-6 Promotion of worker health	Annual Report 2023	Environmental, Social and Governance - ESG Governance Environmental, Social and Governance - People Wellbeing - Employee health and safety	56 73, 76
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Annual Report 2023	Environmental, Social and Governance - ESG Governance Environmental, Social and Governance - People Wellbeing - Employee health and safety	56 73, 76
	403-8 Workers covered by an occupational health and safety management system	Annual Report 2023	Environmental, Social and Governance - ESG Governance	56
	403-9 Work-related injuries	Annual Report 2023	Environmental, Social and Governance - People Wellbeing - Employee health and safety	76
	403-10 Work-related ill health	N/A	We operate in a clean environment with no heavy chemicals present, reference is made to Environmental, Social and Governance - People wellbeing - Employee health and safety.	76
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Annual Report 2023	Environmental, Social and Governance - People Wellbeing - Employee engagement and career development Breakdown per gender: <ul style="list-style-type: none"> <li>33.1 average hours of training per male employee</li> <li>23.3 average hours of training per female employee</li> </ul>	76 - 77
	404-2 Programs for upgrading employee skills and transition assistance programs	Annual Report 2023	Environmental, Social and Governance - People Wellbeing - Employee engagement and career development	76, 77
	404-3 Percentage of employees receiving regular performance and career development reviews	N/A	All employees receive annually a regular performance and career development review.	N/A
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Annual Report 2023	Diversity Supervisory Board reference is made to page 137 of the Annual Report 2023 for details and further to the report of the Supervisory Board - Composition and diversity. Corporate Governance - Diversity and inclusion Diversity Employees: Environmental, Social and Governance - People Wellbeing - Diversity and inclusion Besi does currently not include an overview of age groups, will be included in 2024 Diversity, Inclusion, Board of Management and Supervisory Board.	132, 137 73, 75
		Diversity and Inclusion Policy		2, 3

GRI Standard	Disclosure	Location	Section/remarks	Page(s)
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	N/A	No reported incidents of discrimination.	N/A
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Annual Report 2023 Supplier Code of Conduct	Environmental, Social and Governance - Responsible Business - Resonsible supply chain Supplier Code of Conduct: Freedom of association and collective bargaining.	78 3
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	Annual Report 2023 Supplier Code of Conduct ESG policy	Environmental, Social and Governance - Responsible Business - Resonsible supply chain Supplier Code of Conduct: Child/underage labor We strive to eliminate any discrimination including any distinction, exclusion or preference made on the basis of race, color, sex, gender, religion, political opinion, physical or mental disability, national extraction or social origin and promote equal opportunities in our value chain. ESG policy	78 3 4
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Annual Report 2023 Supplier Code of Conduct ESG policy	Environmental, Social and Governance - Responsible Business - Resonsible supply chain Supplier Code of Conduct: Forced labor We strive to eliminate any discrimination including any distinction, exclusion or preference made on the basis of race, color, sex, gender, religion, political opinion, physical or mental disability, national extraction or social origin and promote equal opportunities in our value chain. ESG policy	78 3 4
GRI 411: Rights of Indigenous Peoples 2016	411-1 Incidents of violations involving rights of indigenous peoples	N/A	No reported incidents of violations involving rights of indigenous people.	N/A
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	Annual Report 2023	Environmental, Social and Governance - Responsible Business - Community Impact	80
	413-2 Operations with significant actual and potential negative impacts on local communities	N/A	Not applicable	N/A
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	Annual Report 2023	Environmental, Social and Governance - Responsible Business - Resonsible supply chain In 2023 progress was made on ESG-related topics and targets through engagement with suppliers. We set expectations as to the type of ESG information required of them ahead of Besi's annual Supplier Day. Additionally, we began collecting RBA and ESG information as part of the scorecard used in supplier audits. Additionally, we began collecting RBA and ESG information as part of the scorecard used in supplier audits. 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. 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. In 2024 we will continue developing supplier screening focusing on social criteria.	78 - 79
	414-2 Negative social impacts in the supply chain and actions taken	Supplier Code of Conduct	Supplier Code of Conduct: Business Ethics	5 - 6
GRI 415: Public Policy 2016	415-1 Political contributions	N/A	No political contributions	N/A
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	Data Privacy Statement	No substantiated complaints received	N/A

### Annex 3: Reporting Criteria Material Topics Environmental, Social and Governance

Pillar	Topic	Code	Reference	Remark
Environmental Impact	Energy and renewable energy	SASB	<ul style="list-style-type: none"> <li>TC-SC-130a.1</li> </ul>	The percentage grid electricity is included in the annex SASB Reference Table 2023.
		GRI	<ul style="list-style-type: none"> <li>GRI 302-1 and GRI 302-3</li> </ul>	<p>In the annex GRI Reference Table 2023 a breakdown of the energy and fuel consumption is included.</p> <p>The data on the energy consumption is derived from meter readings and/or invoices from suppliers. In case the energy consumption is included in the rent an estimate is made of Besi's share in the total energy consumption of the building.</p> <p>General available conversion factors are used to convert the energy usage into GWh:</p> <p>Gasoline: 1 liter = 8.9 kWh</p> <p>Diesel: 1 liter = 10 kWh</p> <p>Gas: 1 m<sup>3</sup> = 9,769 kWh</p>
	Carbon emissions	SASB	<ul style="list-style-type: none"> <li>TC-SC-110a.1 and TC-SC-110a.2</li> </ul>	SASB only includes Scope 1 emissions, Besi discloses also Scope 2 and 3 emissions.
		GRI	<ul style="list-style-type: none"> <li>GRI 305-1, 305-2 (location based), 305-3 and 305-4</li> </ul>	
	Waste and hazardous material use	SASB	<ul style="list-style-type: none"> <li>TC-SC-150a.1 (Hazardous waste)</li> </ul>	Percentage of hazardous waste recycled is included in the Annex SASB Reference Table 2023.
		GRI	<ul style="list-style-type: none"> <li>GRI 306-3, no breakdown by composition will be included</li> </ul>	
	Water use	SASB	<ul style="list-style-type: none"> <li>TC-SC-140a.1</li> </ul>	
Sustainable design	Own	<ul style="list-style-type: none"> <li>Besi shall report the following: A description of the approach to sustainable design, including: <ul style="list-style-type: none"> <li>- a general description of sustainable design including the main focus areas;</li> <li>- the approach regarding sustainable design as a means of reducing the environmental impact;</li> <li>- the inclusion of product life cycle assessment as part of sustainable design;</li> <li>- whether systems can be customized, reconfigured and redeployed for other production purposes over their product life span, thus extending their useful life and reducing the environmental impact;</li> <li>- whether initiatives have been deployed regarding the extension of the useful life of products delivered.</li> </ul> </li> </ul>		

Pillar	Topic	Code	Reference	Remark
People Wellbeing	Diversity and inclusion	GRI	<ul style="list-style-type: none"> <li>GRI 405-1-b.i</li> </ul>	The definition of manager is: an employee of job grade manager or above and managing team members.
		Own	<ul style="list-style-type: none"> <li>Disclose percentage of women of the total fixed headcount.</li> <li>Disclose percentage of total female managers of total managers.</li> <li>Disclose percentage of local national management of total management.</li> </ul>	
	Employee health and safety	SASB	<ul style="list-style-type: none"> <li>TC-SC-320a.1 and TC-SC-320a.2</li> </ul>	
		Own	<ul style="list-style-type: none"> <li>Disclose sickness rate as % of working days (calculation based on headcount).</li> <li>Disclose total number of incidents in the workplace.</li> <li>Incidents are grouped into categories by severity: (i) fatalities, (ii) major absences (of more than four days), (iii) minor absences (of less than four days) and (iv) first aid cases in which employees can resume work immediately after treatment or the following day.</li> </ul>	
	Employee engagement and career development	GRI	<ul style="list-style-type: none"> <li>GRI 404-1 and GRI 404-2-a, Besi will only include the average training hours per employee and per gender, no breakdown will be provided in employee category.</li> </ul>	
		Own	<ul style="list-style-type: none"> <li>Disclose employee engagement as calculated by external advisor.</li> </ul>	
Responsible Business	Ethics and compliance	GRI	<ul style="list-style-type: none"> <li>GRI 206</li> </ul>	
		Own	<ul style="list-style-type: none"> <li>Disclose reported violations of Besi's Code of Conduct.</li> </ul>	
	Responsible supply chain	Own	<ul style="list-style-type: none"> <li>Disclose the percentage of purchase volume audited by Besi.</li> <li>Disclose the percentage of suppliers who have signed the Self-Assessment Questionnaires, Code of Conduct Supplier Agreements and Conflict Free Sourcing Initiative.</li> <li>Number of suppliers which signed the various target documents is determined with corresponding purchasing volume.</li> <li>Based on data above, the % for responsible business is calculated.</li> </ul>	
	Community impact	Own	<ul style="list-style-type: none"> <li>Disclose how Besi supports activities in the local communities in which it operates.</li> </ul>	
	Tax practices	GRI	<ul style="list-style-type: none"> <li>GRI 207-1, GRI 207-2 and GRI 207-3</li> </ul>	
Other	Topic	Code	Reference	Remark
Material topics	Material Topics	GRI	<ul style="list-style-type: none"> <li>GRI 3</li> </ul>	

#### Annex 4: Taskforce on Climate-related Financial Disclosures

##### 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.

This is our second year reporting against TCFD recommendations. In accordance therewith, we have made climate-related disclosures in the Annual Report 2023 broadly in line with their recommendations on the following topics:

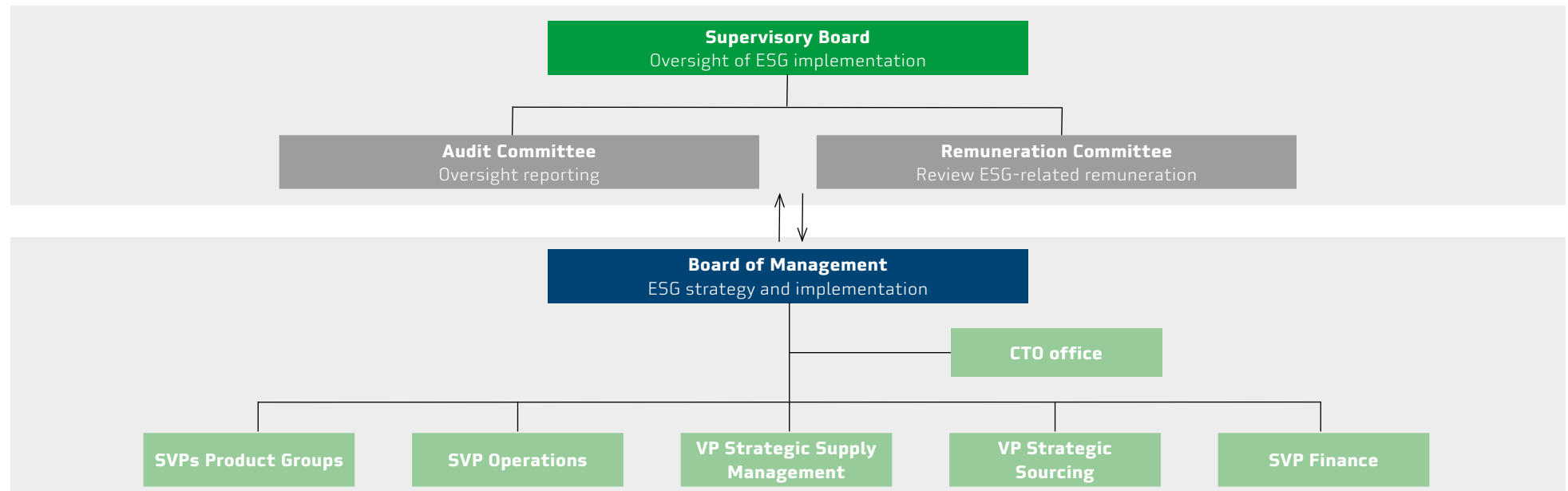
- Governance (all recommended disclosures)
- Strategy (all recommended disclosures)
- Risk management (all recommended disclosures)
- Metrics and targets (all recommended disclosure)

In the future, we intend to evaluate our practices and consider opportunities to enhance disclosures on an ongoing basis in order to expand best practice reporting against ESG frameworks.

##### Governance

Disclose the organization’s governance around climate-related risks and opportunities.

#### ESG GOVERNANCE STRUCTURE



**Recommended disclosure: a. Describe the board's oversight of climate-related risks and opportunities.**

Besi's Board of Management is responsible for the direction of our ESG strategy which includes climate-related issues. Developments with respect to Besi's ESG initiatives are discussed regularly with the Supervisory Board where we present progress against goals and targets for climate-related issues.

In 2020, we introduced ESG reporting on a quarterly basis. Reporting data is used to evaluate Besi's ESG progress and risks which include climate change, natural resource conservation and pollution. Short- and long-term topics are also addressed through measures such as a materiality analysis, key performance indicators for Scope 1, 2 and 3 emissions, water and energy consumption and waste disposal, customer satisfaction and employee engagement metrics, supplier audits, stakeholder dialogue and climate-related scenario analysis.

**Recommended disclosure: b. Describe management's role in assessing and managing climate-related risks and opportunities.**

The Board of Management is responsible for defining and achieving Besi's strategy and ESG objectives. Day-to-day responsibility resides with the SVPs and facility management in their respective departments and locations. Senior management is engaged to (i) assess climate-related issues, (ii) develop climate-related initiatives and (iii) monitor and track progress against Besi's climate-related targets as follows:

- CTO Office (responsible for supporting sustainable solutions for Besi's assembly equipment).
- SVPs Product Groups (responsible for climate-related aspects associated with sustainable design such as lower material consumption over product life cycles and management of Besi's product group operations).
- SVP Operations (responsible for managing Besi's production sites and for climate change related aspects of operations such as increasing the energy efficiency of its facilities).
- VP Strategic Supply Management (responsible for collection of sustainability related information from our suppliers and monitoring compliance with Besi's responsible supply chain and Supplier Code of Conduct).
- VP Strategic Sourcing (responsible for review and presentation of Besi's progress per ESG initiatives across its facilities and product lines).
- SVP Finance (responsible for ESG data review including data collection, co-ordination of ESG reporting and analysis of target versus actual results).

**Strategy**

Disclose the actual and potential impact of climate-related risks and opportunities on the organization's business, strategy and financial planning where such information is material.

**Recommended disclosure: a. Describe the climate-related risks and opportunities the organization has identified over the short-, medium-, and long-term.**

Besi considers climate-related risks and opportunities across three time horizons:

- Short-term (0-2 years): The annual budget includes capital expenditures for our production facilities over a two-year time period.
- Medium-term (period up to 2030): This period is considered the timeframe for major product and market trends in alignment with our five-year planning cycle.
- Long-term (2030 - 2050): Climate risks based on our scenario assessments that align with a 2050 horizon.

The tables below generally describe the climate-related risks considered over the timeframes described above. We plan to further evaluate these risks and their associated business impacts in a more comprehensive manner in future years:

## CLIMATE-RELATED RISKS

Category of Climate Risk	Climate Risk Drivers	Main Affected Time Horizon	
Transition Risk	Policy & Legal	<ul style="list-style-type: none"> <li>Local, state, regional and national regulatory pressure to set more strict energy efficiency and emissions intensity targets for Besi and our value chain.</li> </ul>	Medium – Long
	Technology	<ul style="list-style-type: none"> <li>Uncertainties that surround the development and implementation of carbon reduction and energy efficient technologies for our systems.</li> </ul>	Medium – Long
	Market	<ul style="list-style-type: none"> <li>Uncertainty about the sustainability of sourcing and refining materials essential to Besi’s products.</li> </ul>	Short – Medium – Long
	Reputation	<ul style="list-style-type: none"> <li>Besi will be required (or strongly pressured) to use the Company’s sustainability performance as a key consideration in investment or partnership decisions.</li> </ul>	Short – Medium – Long
Physical Risk	Acute	<ul style="list-style-type: none"> <li>Increased frequency and severity of river floods, cyclones and wildfires.</li> </ul>	Short – Medium – Long
	Chronic	<ul style="list-style-type: none"> <li>Rising air temperatures affecting working conditions, living conditions and the frequency of chronic heat waves.</li> </ul>	Long

### Recommended disclosure: b. Describe the impact of climate-related risks and opportunities on the organization’s businesses, strategy and financial planning.

We have defined our climate-related goals and ambitions with specific targets identified to guide our activities until 2030, set the objective of net-zero carbon emissions in our operations and the objective of net zero carbon emissions. We have determined targets per location to reduce our energy and water usage, hazardous and non-hazardous waste and CO2 emissions. As a result, we are focused on addressing such risks by integrating climate considerations into Besi’s sustainable design efforts, facility investments and energy/resource efficiency as detailed below:

- *Sustainable Design*

Besi continually seeks potential opportunities to develop new ways to assemble semiconductors and components used in advanced electronic applications. We have proactively developed a more efficient and cleaner industry through our products, particularly low carbon products and services in order to help customers operate more efficiently and in a more environmentally friendly and cost saving manner. Furthermore, we offer upgrade kits to customers for certain product series which can increase the lifespan of our systems.

For more information, please refer to page 71 of our Annual Report 2023, where we highlight the favorable results of our collaboration with the Lucerne University of Applied Sciences and Arts (Switzerland) as well as the inception of our “Design-to-X” initiative. These initiatives help ensure that we keep pace with the transition to a net-zero economy by complying with potential regulations, providing energy efficient technology and by maintaining a strong reputation with stakeholders.

- *Facility Investments*

Over the past three years, we have made investments in our facilities to facilitate the adoption of renewable energy technologies. Such investments were targeted to reduce transitional risks and included:

- Purchase and utilization of Solar PV panels at the Besi APac and Besi Austria facilities.
- Installation of a groundwater heatpump at Besi’s Radfeld, Austria facility to replace natural gas usage for its central heating system.
- Renewable energy procurement from local electricity suppliers.
- Installation of E-charge stations at our Austrian, Chinese, Dutch and Swiss facilities.
- Conversion of company cars from ICE to hybrid or electric.
- Capital spending to reduce the risk of flooding at our Malaysian facility.

We will continue to assess investment opportunities in the future to improve the resilience of our facilities. This assessment includes the prioritization of actions at our most vulnerable locations based on the scenario analysis conducted in 2022.

- *Energy/Resource Efficiency*

Additionally, we have worked on becoming more energy efficient through the purchase and utilization of more energy-efficient process technologies and the better insulation of our facilities. Such initiatives have included:

- LED light and Smart meter installation.
- Air compressor replacements.
- Upgraded heating, ventilation and air conditioning (HVAC) units.
- Better management of the transport mix of our freight operations with a focus on local sourcing.
- Installation of sun/heat protective foils.
- Implementation of sustainable design methods in certain of our Die Attach platforms.

**Recommended disclosure: c. Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2 °C or lower scenario.**

Besi engaged an external consultant in 2022 which conducted a scenario-based climate change risk assessment exercise to determine the potential implications of climate risks on our business. The objective of the exercise was, in part, to strengthen the resilience of our ESG and climate related strategies moving forward. Intergovernmental Panel on Climate Change ("IPCC") warming scenarios were utilized to build our Besi-specific scenarios. The IPCC provides pathways for assessing the physical impacts of climate change utilizing varying degrees of GHG atmospheric emissions. The majority of the publicly available climate-related scenario assumptions do not directly impact Besi because they focus primarily on transitions for heavy-emitting sectors such as utilities. As such three qualitative transition scenarios were drafted from existing scenarios and trends and then combined with three warming scenarios:

- *Business-as-usual*

RPC 8.5 - Extremely high emissions scenario with the global mean temperature expected to rise by 3.7 °C (2.6-4.9 °C) by the end of the 21<sup>st</sup> century. The scenario assumes a high dependence on fossil fuels and no policy-driven mitigation.

Qualitative assumptions:

- Limited impact of emissions performance on Besi's reputation and market value.
- Available technologies do not have the capability for large scale emissions reduction.
- Reduced investment in new technologies due to high costs and limited public sector incentives.

- *Delayed transition*

RPC 6.0 - High emissions scenario with global mean temperature expected to rise by 2.2 °C (1.4-3.1 °C) by the end of the century assuming emissions peak around 2080 and then decline.

Qualitative assumptions:

- Inconsistent regulation.
- Uneven impact of emissions performance on Besi's reputation and market value.
- Reduced demand in geographies with high vulnerability and exposure to climate risks.

- *Net-zero*

RPC 2.6 - A stringent pathway with a large regulatory push. The development of new technologies increases the probability of keeping global temperature growth below 2 °C by 2100.

Qualitative assumptions:

- Strict regulation.
- Large impact of emissions performance on Besi's reputation and market value.
- Customers have high interest in more energy efficient/lower emission products which impacts purchasing decisions.

### Business impacts

Set forth below is a table which summarizes the results of the scenario analysis. It identifies how each scenario may impact Besi's business and operations and our relative preparedness for each scenario outcome:

	RCP 8.5/Business-as-usual	RCP 6.0/Delayed Transition	RCP 2.6/Net-zero
Physical climate risks	<ul style="list-style-type: none"> <li>Increased acute risk of flooding and heatwaves affecting manufacturing operations and supply chain.</li> <li>Potential for additional disruption to offices and production sites.</li> </ul>		<ul style="list-style-type: none"> <li>Impact of flooding and heatwaves on manufacturing already being observed.</li> </ul>
Transition climate risks	<ul style="list-style-type: none"> <li>Well prepared for policy/legal risks.</li> <li>Low potential exposure to carbon pricing.</li> <li>Relatively little pressure from customers on product efficiency.</li> </ul>	<ul style="list-style-type: none"> <li>Uncertain customer behaviour and consumer preferences.</li> <li>Low potential exposure to carbon pricing in the short term. High exposure in the long term.</li> <li>Uneven pressure on product efficiency.</li> </ul>	<ul style="list-style-type: none"> <li>Greater potential exposure to policy/regulatory risks.</li> <li>More potential reputational risk if not net-zero.</li> <li>More significant transition costs.</li> <li>Higher potential exposure to carbon pricing.</li> </ul>
Transition opportunities	<ul style="list-style-type: none"> <li>Increased resilience against climate and weather impacts.</li> </ul>	<ul style="list-style-type: none"> <li>Energy and resource efficient product design.</li> <li>Incorporate renewable technologies.</li> <li>Drive decarbonization of upstream supply chain.</li> <li>Improve energy efficiency and associated energy costs.</li> <li>Opportunity to drive customer emissions reduction.</li> </ul>	
<b>Company preparedness on transitional risks</b>			
<b>Policy/Regulation</b>	Well prepared	Well prepared	Under evaluation
<b>Market</b>	Well prepared	Well prepared	Well prepared
<b>Reputation</b>	Well prepared	Under evaluation	Under evaluation
<b>Technology</b>	Well prepared	Well prepared	Under evaluation

The key insights from the scenario analysis are as follows:

- Besi is well prepared for climate-related market risks.
- A delayed or net-zero transition presents Besi with the largest opportunities for growth if we manage the climate-related risks effectively.
- We are currently evaluating ways in which we can further contribute to a net-zero transition.

## Risk management

Disclose how the organization identifies, assesses and manages climate-related risks.

**Recommended disclosure: a. Describe the organization's processes for identifying and assessing climate-related risks.**

Besi's ESG strategy is influenced by important global trends currently such as climate change, natural resource conservation, pollution and the circular economy as well as human challenges such as diversity, human rights and the recruitment of qualified technical personnel. We have internal control and risk management systems in place designed to address and help identify and limit climate-related risk factors as well as other ESG and non-financial risks that could affect both our strategy and business operations. Short- and long-term topics are assessed through measures such as materiality analyses, key performance indicators for Scope 1, 2 and 3 emissions, water usage and waste disposal, customer and employee satisfaction metrics, supplier audits and continuous stakeholder dialogue.

Besi's ESG and non-financial risks are governed by a set of guidelines and instructions including:

- ESG Policy
- RBA Supplier Certification
- Conflict Minerals Policy
- Code of Conduct
- Supply Chain Policy
- Supplier Code of Conduct
- Code of Ethics for Senior Financial Officer
- Whistleblower procedure
- Guidelines regarding authorizations

Besi regularly evaluates ESG topics deemed important to the conduct of its operations and the development of its corporate culture. We periodically reassess our societal and environmental impact in consideration of stakeholders' concerns and adjust the ranking of high and medium assessment priorities. In 2022, we engaged a third-party consultant to conduct scenario analyses in order to identify potential risks and opportunities relevant to Besi.

**Recommended disclosure: b. Describe the organization's processes for managing climate-related risks.**

The Board of Management is responsible for the management of internal and external risks associated with Besi's business activities and to guarantee compliance with applicable legislation and regulations. The Board of Management is also responsible for the monitoring and reporting of such identified risks and leading the response across the organization to address any new risks which may arise. In addition, initiatives have been

established for any specific climate change risks identified that are considered material per facility. As a result, targets have been set so that management can track climate-related KPIs and report progress to the Supervisory Board.

Please refer to the 'Risk Management' Section on page 82 of the Annual Report 2023 for more detail on Besi's internal control and risk management systems to manage and mitigate climate-related and other ESG related risks.

**Recommended disclosure: c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.**

Besi's risk management program seeks to identify and control potential risks and events which may affect our strategy, continuity, business and performance. We have identified the following climate-related risks considered to have significant relevance:

- 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.
- Asian production and personnel expansion could expose us to additional risks related to corruption and human rights issues in the region.
- 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.

Please refer to the 'Risk Management' Section on page 82 of the Annual Report 2023 for more information.

## Metrics and targets

Disclosure of metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

**Recommended disclosure: a. Disclose the metrics used by the organization to assess climate related risks and opportunities in line with its strategy and risk management process.**

In addition to measuring and disclosing our Scope 1, 2 and 3 emissions and emissions intensity, we track and monitor a number of other climate-related metrics and KPIs to better help us manage climate-related risks and opportunities:

- Fuel and Electricity consumption (Pages 65 and 68 of our Annual Report 2023)
- Renewable Energy consumption (Pages 65 and 68 of our Annual Report 2023)
- Water withdrawal (Pages 66 and 71 of our Annual Report 2023)
- Hazardous and Non-hazardous Waste (Pages 66 and 71 of our Annual Report 2023)
- Percentage of EU Taxonomy-eligible and aligned activities (Pages 57 through 61 of our Annual Report 2023)

Recommended disclosure: b. Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.

Our Scope 1, 2 and 3 emissions data have been reviewed by a third party, Ernst & Young Accountants LLP, for the years 2021, 2022 and 2023 whose assurance report is included in Other Information of the Annual Report 2023. Please refer to page 56 and 69 of our Annual Report 2023 for information relating to the Scope 3 categories included and methodology used to calculate emissions data.

Emission (tCO <sub>2</sub> ) and Emission Intensity (tCO <sub>2</sub> e/€ million revenue)	2019		2020		2021*		2022*		2023*	
	Absolute	Relative	Absolute	Relative	Absolute	Relative	Absolute	Relative	Absolute	Relative
Scope 1	269	0.8	279	0.6	331	0.4	335	0.5	208	0.4
Scope 2	8,796	24.7	8,308	19.2	10,481	14.0	3,420	4.7	4,916	8.5
Scope 3	7,407	20.8	7,157	16.5	11,942	15.9	9,817	13.6	9,843	17.0
Total Scope 1, 2 and 3	16,472	46.2	15,744	36.3	22,573	30.1	13,573	18.8	14,967	25.9

\* 2021, 2022 and 2023 are the years for which emissions data have been reviewed by Ernst & Young Accountants LLP, Besi's independent auditor.

We plan to expand our climate-related scenario analysis and disclosure in the future so as to better quantify climate-related risks and opportunities achieved.

Recommended disclosure: c. Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

In 2021, Besi set the objective of net-zero carbon emissions by 2050 in recognition of the global ecological and societal imperatives caused by climate change. In addition, we set an objective of reaching net zero greenhouse gas emissions in our operations by 2030, incorporating scope 1 and 2 emissions. Toward this end, we have set interim emission-intensity targets for our Scope 1, 2 and 3 emissions and other climate related metrics against which progress is measured and disclosed in this ESG Report and Annual Report 2023. See pages 65 through 73 in our Annual Report 2023 for more information on how such metrics help support Besi's climate-related efforts.