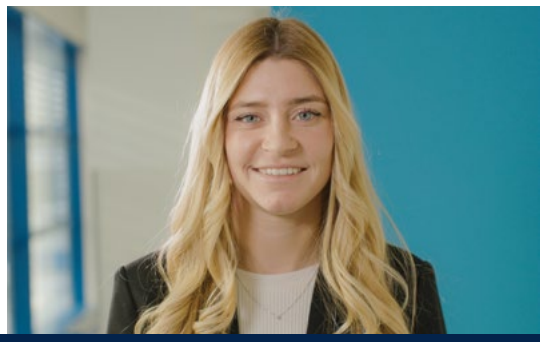
ACCELERATING SUSTAINABILITY TOGETHER



2023 Sustainability report

2022 performance

life.augmented

About this report

Scope and reporting period

This annual sustainability report outlines the sustainability strategy, programs, and performance of STMicroelectronics (ST) during the calendar year 2022. It is aimed at stakeholders who want to learn more about our commitment and approach to sustainability. Unless otherwise stated, the information and data cover all our activities and sites. | 2-1 | 2-2 | 2-3 |

There are no significant changes to the organization and its supply chain. There is no restatement of information given in previous reports. | 2-4 |

Report structure and content

This report is aligned with Global Reporting Initiative (GRI) Standards for stakeholder inclusiveness, sustainability context, materiality, and completeness. It focuses on the material topics of our sustainability strategy (see **Sustainability strategy**), which are aligned with our business priorities.

We identified these topics in 2020 through a materiality exercise that considered the sustainability context and involved a review of stakeholders' concerns (see **Stakeholder engagement**). For each material topic, we define ambitions and goals, and implement programs. In response to our stakeholders' expectations and for a better understanding of our performance, we disclose data and information from previous years. We also include examples of actions we have carried out at our sites and quotes from stakeholders, enabling them to express their own views on our sustainability performance. | 2-29 | 3-1 | 3-2 |

The report has been prepared in accordance with GRI Standards. We use labels to disclose GRI Standards throughout the report and we list all references to GRI Standards and the corresponding page numbers in the **GRI content index**.

We also disclose how and to what extent our economic activities are associated with environmentally sustainable economic activities, as defined in the new EU Taxonomy Regulation (see **EU Taxonomy**).

In addition, our disclosures are aligned with the **Sustainability Accounting Standards Board (SASB) semiconductor standard** and the **Task Force on Climate-related Financial Disclosures (TCFD)** framework.

Use of symbols

We use the following symbols in this report to indicate our progress towards our objectives:

✓ Target achieved

◌ In progress

✗ No progress/not achieved

External verification

ST's Sustainability Group Vice President has appointed DNV Business Assurance France (DNV) to provide us with assurance services. DNV has verified the content and data in this report and confirmed it has been prepared in accordance with the GRI Standards. DNV interviewed all relevant corporate departments and three of the stakeholders quoted in this report. DNV audited three manufacturing sites – Catania (Italy), Muar (Malaysia), and Tours (France) – to validate our data reporting process and provide assurance for this year's report. In addition, DNV conducted a higher verification of four sustainability indicators related to safety, climate change, gender diversity, and employee engagement at Agrate (Italy), Ang Mo Kio (Singapore), Bouskoura (Morocco), and Shenzhen (China). Information and data relating to the ST Foundation were not part of DNV's external verification exercise. See **DNV's assurance statement**. | 2-5 |

Availability

This sustainability report, published on April 20, 2023, is available at **sustainabilityreports.st.com** . Previous reports can be accessed at **www.st.com/company-reports** . Printed copies are available on request. | 2-3 |

Supporting the UN Global Compact and Sustainable Development Goals

We have been a signatory of the United Nations Global Compact since 2000 and we follow its 10 principles (see **International standards**). This report describes the actions we took during 2022 to implement these principles. It therefore serves as a reference to answer the Communication on Progress questionnaire.

ST supports the United Nations Sustainable Development Goals (SDGs). Our contribution to 11 of the 17 SDGs is highlighted throughout this report, including indicators to measure our performance against these goals: SDG

Feedback | 2-1 | 2-3 |

We value feedback and encourage contributions and suggestions from all our stakeholders. You can email us at **sustainable.development@st.com** or write to us at our headquarters:

Corporate Sustainable Development
STMicroelectronics International NV
39 Chemin du Champ-des-Filles
C.P. 21
CH-1228 Geneva – Plan-Les-Ouates
Switzerland

"This report has been prepared according to GRI Standards and is externally assured. It represents a balanced and reasonable presentation of our organization's economic, environmental and social performance. It also demonstrates our commitment to the UN Global Compact, to which we have been a signatory since 2000."

Jean-Marc Chery, President and CEO

Although reasonable efforts have been made to ensure the consistency of the summary financial information for the year 2022 in this report with ST's financial reporting, reliance should only be placed upon the complete financial reporting contained in ST's Annual Report on Form 20-F for the year ended December 31, 2022, as filed with the SEC on February 23, 2023, which can be found at **www.st.com** . Some of the statements contained in this report that are not historical facts are statements of future expectations and other forward-looking statements (within the meaning of Section 27A of the Securities Act of 1933 or Section 21E of the Securities Exchange Act of 1934, each as amended) based on management's current views and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance, or events to differ materially from those in such statements. Certain such forward-looking statements can be identified by the use of forward-looking terminology such as 'believes', 'may', 'will', 'should', 'would be' or 'anticipates' or similar expressions or the negative thereof or other variations thereof or comparable terminology, or by discussions of strategy, plans or intentions. Some of the relevant risk factors are described in 'Item 3. Key Information – Risk Factors' included in our Annual Report on Form 20-F for the year ended December 31, 2022. We do not intend, and do not assume any obligation, to update any information or forward-looking statements set forth in this report to reflect subsequent events or circumstances.

Contents

2023 edition

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We also would like to thank:

- everyone who kindly agreed to be quoted in this report and provide testimony of their collaboration with ST
- everyone who kindly agreed to have their pictures published in the report
- our interfaces at ST sites, sustainability champions and EHS teams who support our activity all year round
- site directors and human resources managers
- the teams audited in Agrate, Ang Mo Kio, Bouskoura, Catania, Muar, Shenzhen and Tours for their availability

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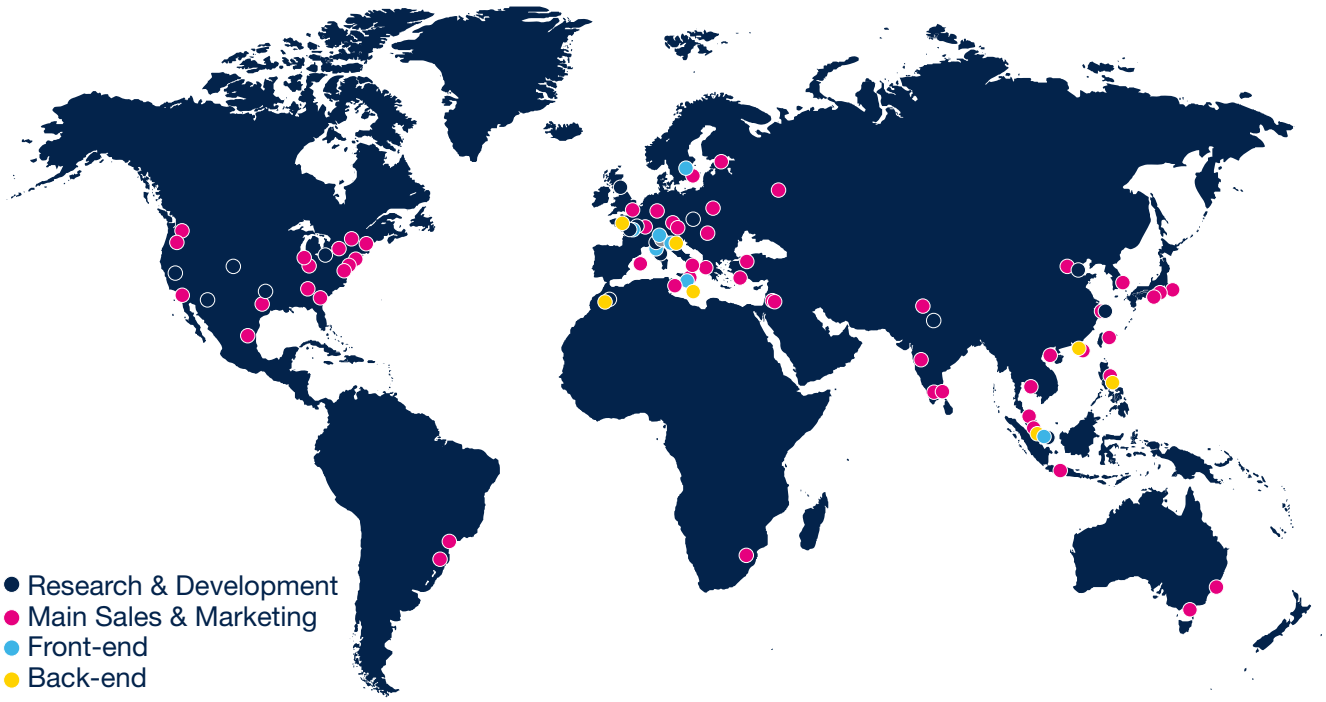
ST at a glance



as of December 31, 2022

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- one of the world's largest semiconductor companies
- 2022 revenues of US$16.1 billion
- listed: NYSE, Euronext Paris and Borsa Italiana, Milan
- 50,000+ employees worldwide
- 9,000+ people working in R&D
- 14 manufacturing sites
- over 80 sales & marketing offices serving over 200,000 customers across the globe
- signatory of the United Nations Global Compact (UNGC)
- member of the Responsible Business Alliance (RBA)

Our value proposition

For our shareholders

Return value in line with our sustainable, profitable growth objective

Sustainable and profitable growth

For our customers

Provide differentiating enablers

Independent, reliable and secure supply chain

For all our stakeholders

Committed to sustainability

Our values:
Integrity – People – Excellence

Foreword by our President and CEO

We believe technology plays an important role in helping to solve environmental, social, and economic challenges. ST develops technologies and products that are key enablers for transforming our economies through digitalization, smarter mobility, and decarbonization. Our business strategy reflects these long-term trends and paves the way to sustainable and profitable growth, enabling us to generate long-term value for all stakeholders.

2022 was a year marked once again by strong demand in the automotive and industrial sectors, still impacted by supply chain challenges due to continuing shortages and capacity constraints. In the second half, we started to see a softening in the personal electronics and computer peripherals market. ST is an integrated device manufacturer: our in-house manufacturing is complemented by outsourcing through a network of foundries and Outsourcing Semiconductor Assembly and Test (OSAT) partners. We believe that mastering the full semiconductor value chain, from chip design to wafer fabrication, and assembly and testing, allows us to provide innovative and sustainable solutions to our customers. It also means we can better control the impact of our manufacturing activities on resources and local communities, while building a resilient supply chain and addressing our operational footprint.

In 2022, we continued to transform our manufacturing base, with a significant expansion of our 300mm capacity and a strong focus on wide-bandgap semiconductors. In addition, we put greater emphasis on cooperative R&D with our global network of academic and private partners. We again improved our social and environmental footprint throughout the product lifecycle, with 77% of new products identified as responsible.

In December 2020, we committed to becoming carbon neutral by 2027. To achieve this ambitious target, we have built a comprehensive program looking at all aspects of our business and operations. We are making substantial progress. In 2022, our global sourcing of electricity from renewable energy grew to 62%, from 51% in 2021. We have reduced our greenhouse gas emissions (scopes 1 and 2) by 40% in absolute terms compared to 2018 (up from 34% in 2021). We achieved this despite the challenges in the global energy market and we remain focused on maintaining these improvements as we grow our manufacturing footprint.

Finally, the strategic value of, and interest in, our industry has never been higher. With this comes stronger competition for talent. I am proud to report that although already high, our employee engagement is still growing. Over 19,000 employees have been trained on the new leadership model we have designed to support our transformation journey to meet the challenges of the future. This includes actions and training to support a more diverse and inclusive culture. Sustainability performance is now part of the incentive program for over 21,000 employees. In parallel, we continue to enhance our awareness, education, and training initiatives around STEM, targeting future young professionals in our wider global networks. This is vital not only for the future of ST, but for the future of our industry.

Our determined progress across diverse areas, as detailed in this report, was recognized again in 2022, including our presence in the Dow Jones Sustainability World and Europe indices, as well as in other ESG rankings and international certifications. This external recognition is an important validation of our actions and our transparency. It helps to confirm our approach and inspires us with the confidence to continue to accelerate sustainability together with our customers, partners, and employees worldwide.

Jean-Marc Chery
President and CEO

| 2-22 |

Our business model

Resources

Human

- 50,000+ employees
- 118 nationalities
- 35% women, 65% men
- Average age: 40

Financial

- US$19.98 billion total assets
- US$3.52 billion capital expenditures
- US$1.8 billion net financial position

Intellectual

- 9,000+ employees in R&D
- US$1.9 billion R&D investments
- 186 R&D partnerships

Manufactured

- 14 main manufacturing sites in 9 different countries
- 66% of employees in manufacturing
- ~6,600 suppliers

Natural

- 2,878GWh of energy consumed
- 62% of renewable electricity
- ~22 million m^3 of water withdrawn
- ~4,300 chemicals used

Social and relationship

- ST values and Code of Conduct
- US$2.2 million cash donated by ST to local communities
- 148,000+ hours donated to local communities

Main steps in our value chain

Suppliers

We purchase raw materials, equipment, energy, gas, chemicals and services from many suppliers and subcontractors.

R&D concept and design

New products are created in a multi-step process including architecture conception, electrical layout, electrical and logic simulation, chip layout and generation of the masks that will be used to etch the design in silicon.

Front-end manufacturing

Manufacturing chips requires around 400 separate stages, starting with a plain wafer, and resulting in the etching of several hundreds to thousands of dies.

Management of our impacts

Suppliers

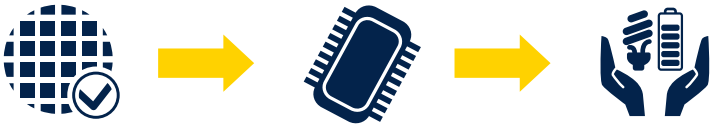
We require our suppliers to implement the Responsible Business Alliance (RBA) standards and encourage ISO and OHSAS certifications to address ethics, social, environmental, health and safety risks. We participate in the Responsible Minerals Initiative.

Products

Through our Sustainable Technology program we design products systematically taking into consideration the environmental impact of the device during its whole lifecycle, including raw materials, transportation, manufacturing, usage and end of life.

People

We ensure the health and safety of our employees through advanced management systems and certification. We implement our Code of Conduct and the RBA standards in all our sites to mitigate our ethics and labor and human rights risks, and carry out regular assessments and audits in all our production sites.



Electrical wafer sorting

Dies on the wafer are electrically tested. This step is known as wafer sort or probe.

Back-end manufacturing

The dies are cut from the wafer before being assembled in a package. The chips are then tested prior to delivery to the customer.

Product use and end of life

We offer a large portfolio of products suitable for the wide range of applications addressed by our customers.

Environment

We deploy programs to reduce our direct and indirect greenhouse gas emissions from all our operations, including Perfluorinated Compounds (PFCs), which have a very long atmospheric lifetime and high global warming potential.

We minimize the environmental, health and safety risks related to the chemicals and materials used in the manufacturing process, by basing the selection, handling, and substitution on the precautionary principles.

We are continually reducing our water footprint through reuse and recycling and all our wastewater is treated before being discharged into the environment.

We reduce, reuse, recycle or recover as much of our waste as possible, rather than sending it to incineration or landfill.

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Unless otherwise stated, all data refer to 2022.

Value created

Human

Engaged and skilled people in an inclusive and safe workplace

- average of 47 hours training per employee
- 86% of employees recommend ST as a great place to work
- 0.12 total recordable case rate (injuries and illnesses) for employees and contractors

Financial

Sustainable financial performance

- US$16.13 billion net revenues
- US$3.68 billion salaries and benefits
- US$416 million income tax paid
- US$212 million cash dividends

Intellectual

Innovative products and solutions

- ~19,500 active patents
- 77% of new products classified responsible products
- 13% of revenues generated by new product lines

Manufactured

Responsible and effective business operations

- 200,000+ customers served
- ISO 9001, 14001, 14064, 22301, 50001, 45001 and IATF certifications
- 100% of largest manufacturing sites covered by RBA audits
- 91% of suppliers' agreement to comply with ST business ethics and corporate responsibility standard

Natural

Mitigation of the impact of our activities

- 40% decrease in GHG emissions scopes 1 and 2 since 2018 (in absolute value)
- 95% of waste reused, recovered or recycled
- 42% of water recycled or reused

Social and relationship

Knowledge and values shared with all

- 228,000+ beneficiaries in local communities
- 660+ volunteering initiatives worldwide
- 972,000+ people trained on computer basics by ST Foundation since 2003

ST process and packaging technologies

We innovate to create unique technologies and products that provide the best solutions to address challenges and provide opportunities for our customers.

The technology developments we make are guided by long-term market trends. These enable or enhance applications for our customers by turning state-of-the-art chip fabrication technologies into cutting-edge commercial products.

The manufacturing of an integrated circuit can be divided into two steps.

- Wafer fabrication, known as front-end, entails extremely sophisticated process technologies to manufacture silicon or composite material chips.
- Assembly and test, known as back-end, involves highly precise and automated packaging and die testing processes.

Our products are built using various fundamental semiconductor process technologies. Many of these are unique to ST and represent the culmination of significant investment and development efforts over decades. Each process is designed and refined to meet the needs of our customers' target applications. I 2-6 I

Orio Bellezza
President,
Technology, Manufacturing, Quality and Supply Chain

We are convinced that we can play a key role in helping to solve environmental and societal challenges. Our technology and product development teams are committed to innovating in fields that support greener and safer living environments. As part of this process, we are accelerating the transition towards clean and efficient energy management. We offer innovative power electronics solutions which enable vehicle electrification, support new energy sources and smart grids to improve people's lives and protect the planet wherever possible."

Smart power technology for greener solutions

Combining power technologies with embedded intelligence is a technical challenge and is vital to enable our customers across the globe to develop more efficient and compact power and energy management solutions. ST has deep expertise in this field, with over 25 years of R&D and multiple generations of products on the market. Below are some of our technologies that are widely used in automotive, industrial, personal electronics, and communications equipment, computer and peripherals applications.

- BIPOLAR-CMOS-DMOS (BCD) is an important technology for power integrated circuits (ICs). We invented this revolutionary technology in the mid-1980s and have continually developed it ever since. We have created a family of silicon processes, each of which combines the strengths of three different process technologies onto a single chip.
- VIPower technologies integrate diverse functionality in single devices. They help applications control high power and sensing and communicate operating status while providing device protection.

- Our STi2GaN product family will allow designers to get the most out of gallium nitride (GaN) technology with a higher level of integration and performance. By combining the advantages of GaN technology with traditional semiconductor materials, a large variety of power applications will benefit in terms of size, performance, and cost.

We are building on our innovations in BCD and other wide-bandgap technologies to make design easier and bring more flexibility and performance to our customers.

High-power innovation

Power transistors are a critical component of every power system. We are constantly innovating to deliver greater efficiency and reliability in silicon and wide-bandgap materials in advanced packages.

- Silicon carbide (SiC) exhibits intrinsic advantages over mainstream silicon, enabling higher energy efficiency in many sustainable applications. ST has been engaging in SiC R&D for over 25 years and has developed market leading SiC solutions, with full supply chain control.
- GaN-based transistors offer unrivaled energy efficiency and power density in power conversion applications. ST's GaN technology portfolio targets a wide variety of applications, such as power supplies and adaptors as well as electric vehicles and renewable energy.
- Our Trench Gate Field-Stop (TGFS) architecture ensures more balanced conduction and switching losses and greater robustness in insulated gate bipolar transistors (IGBTs). ST TGFS devices exhibit structural uniformity measured in fractions of micrometers and remain free of residues left from the various lithography, deposition, etching, metallization, and related phases.
- Our world-leading super-junction (SJ) technology is the driving factor behind our highly successful range of MDmesh Power MOSFETs. This technology allows us to offer higher power densities for more compact customer solutions.

Micro-Electro-Mechanical Systems (MEMS)

Sensors and actuators based on MEMS technology are key to transforming the way the digital and analog worlds interact. ST develops leading-edge MEMS process technologies, packaging, and manufacturing capabilities to create industry-leading solutions for our customers.

We serve all market needs with industry-leading MEMS process technology, innovative product design, and in-depth application expertise.

- Our Thick Epitaxial Layer for Micro-gyroscopes and Accelerometers (ThELMA) process enables the integration of accelerometer and gyroscope mechanical elements in a single chip.
- Other specialized processes allow the creation of MEMS microphones and pressure sensors.
- MEMS actuator technologies such as thermal, electrostatic, electromagnetic, and piezoelectric enable applications such as thermal printheads, laser-based scanning micromirrors, and miniature sound systems.

Digital and mixed-signal technologies for tomorrow's applications

Advances in digital and mixed-signal technologies enable smaller systems without compromising performance. Constant innovation in our radio frequency (RF), analog, mixed signal, and digital technologies are helping our customers meet their current and future power and integration requirements.

- Fully Depleted Silicon-On-Insulator (FD-SOI) delivers outstanding low-power performance and high reliability for cost-effective RF/mmW, digital and mixed-signal applications.
- Our advanced embedded Non-Volatile Memory (eNVM) CMOS processes allow the creation of microcontrollers with embedded memory within a single chip.
- Our embedded Phase Change Memory (ePCM) offers substantially better density and robustness over flash memory and other embedded memories.

- Our BiCMOS technology combines the strengths of two different process technologies into a single chip and allows the development of high-performance RF ICs in a compact and power-efficient design.
- Radio Frequency Silicon-On-Insulator (RF-SOI): our solutions enable the design of a full range of advanced RF Front-End Modules (FEMs).
- Our imaging technology portfolio of proprietary technologies enables specialized and differentiated imaging solutions.

Semiconductor packaging

Innovation in packaging is an essential part of the semiconductor industry. Our unique combination of expertise in process technology development, product design, packaging, and manufacturing enables us to offer our customers the solutions they need for the wide variety of applications we serve. We are constantly innovating to create smaller and more highly integrated chips that increase performance and enhance reliability, while delivering more affordable solutions to the market.

ST's in-house packaging R&D activities allow us to optimize packaging technology to adapt to process and product design requirements. We maximize the technical interactions across our product design, front-end and back-end manufacturing teams to jointly evaluate new process technologies or features and packaging materials.

Some of the areas in which ST is innovating in packaging include:

- power System-in-Package (SiP) integrating multiple dies into a single package for smart power solutions based on GaN, BCD, and ViPower
- silicon carbide power modules for car electrification using innovative design, material, and processes to maximize power density
- power discrete packaging with direct bond copper substrate on the top side of the package to improve thermal coupling with heatsinks
- packages for harsh environments, such as those encountered in automotive and industrial applications
- galvanic isolation built into the chip package for factory automation applications
- high-reliability and low-cost high-pin-count packages for automotive MCUs
- Wafer Level Chip Scale Packaging (WLCSP) for highly size-constrained devices, such as smartphones and wearables
- advanced miniaturization of packages embedding sensors, such as our Time-of-Flight and MEMS devices
- antenna-in-package integration for millimeter wave RF devices (5G and 60 GHz)
- 3D packaging involving stacking multiple dies on top of each other and connecting them using through-silicon vias (TSVs) or other advanced interconnects
- radiation hardened packages for aerospace applications

Learn more about our unique set of innovative and differentiated technologies on **www.st.com/technology** .

ST products and solutions

We create unique innovations and products that solve real-world problems. Through decades of investment, we have developed leading-edge chip manufacturing and packaging technologies that help our customers to bring great ideas to life.

Our chips and systems are found in billions of products, from cars and industrial robots, through washing machines and solar panels, to smartphones and satellite communications equipment. Our technology helps our customers make all these products more intelligent, more energy efficient, more connected, safer, and more secure.

Our strategy is based on long-term trends: smart mobility, power and energy, Internet of Things (IoT), and connectivity. We address four end markets – Automotive; Industrial; Personal Electronics; and Communications Equipment, Computers and Peripherals – where these trends drive the evolving requirements of our customers. I 2-6 I

IoT and connectivity

To support the needs of IoT and connectivity, we provide a variety of products and solutions for embedded processing, artificial intelligence, security, sensing, and actuating.

Collaboration with Microsoft for developing highly secure IoT devices

Security is an increasingly critical function of all connected devices. ST's portfolio covers the full range of secure solutions, including software and hardware embedded in general purpose microcontrollers and microprocessors. These are supported by the STM32Trust ecosystem, which offers a multi-level strategy to enhance security. In 2022, we joined efforts with Microsoft to deliver an Azure IoT cloud reference implementation that leverages the hardened security features of the STM32, complemented with the hardened key store of an ST secure element.

We also provide dedicated secure microcontrollers that meet the highest security standards. These can be found in smartcards used for ID, transport, banking, and SIM cards, as well as pay TV applications.

Extending AI tools with support for deeply quantized neural networks

Embedded processing capabilities are essential for every autonomous device. We offer general purpose microcontrollers, such as our STM32 family, with a wide variety of device options. This ensures designers can find the best solution for their application, whether they require ultralow power consumption, high performance, artificial intelligence (AI), advanced security or a high level of wireless and wired connectivity.

Our comprehensive development ecosystem saves on design costs and reduces time to market. Enhancements in 2022 included upgrades to our support for AI through our NanoEdge AI Studio and STM32Cube.AI, improved graphics support tools, enhancements to our security offer with Amazon Web Services, and extensions of our support for Microsoft Azure RTOS.

Expanding the ecosystem for our microprocessors for industrial applications

Our STM32 microprocessor (MPU) family addresses demanding industrial and IoT applications that require support for large open-source software. During 2022, we announced new MPU products and continued to extend this ecosystem with tools and software that help customers leverage AI, increase security, and implement functional safety systems for industrial applications.

Complete wireless subsystem with Bluetooth Low Energy, Zigbee, and Thread

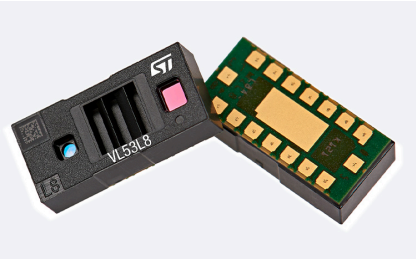
Our wireless connectivity solutions include STM32 microcontrollers with embedded wireless, standalone RF transceivers, and network processors for Bluetooth, Bluetooth Low Energy, Zigbee, Matter, Thread, sub-1GHz long-range networks, and Cellular IoT. We work with expert partners to make it easier for our customers to use cloud services thanks to optimized connectivity software.

In 2022, we introduced new devices, modules, development tools, and supporting software. These included a module for Industry 4.0 applications that simplifies the use of wireless microcontrollers in applications such as intelligent equipment condition monitoring.

Advanced 6-axis IMU with embedded sensor fusion and AI

ST motion and environmental MEMS and sensors offer accuracy, sensitivity, ultra-low power consumption, and embedded intelligence. Our products power flagship smartphones and accessories and help deliver the best user experience. We are present in many automotive and industrial applications, with products designed to meet the performance and reliability requirements of harsh environments.

In 2022, we launched a 6-axis IMU with embedded sensor fusion and AI enabling sophisticated processing in the edge, such as 3D phone mapping, reliable and precise gesture recognition for XR headsets, as well as always-on activity tracking. We also added NanoEdge AI Studio support for on-device learning and inferencing in AI-native MEMS sensors.



Second-generation multizone direct Time-of-Flight sensor

Our patented FlightSense technology, based on the Time-of-Flight (ToF) principle, ensures a high-accuracy, low-power, all-in-one solution for proximity and ranging sensors. They are used for personal electronics and industrial applications, as well as 3D sensing for smartphones and smart driving (LiDAR) features.

In 2022, we announced a multizone ToF sensor for gesture recognition, intruder alert, and human presence detection, as well as our second-generation multizone ToF sensor that uses less energy and can range twice as far as existing products.

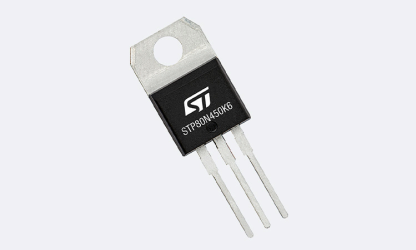
Laser beam scanning system for augmented reality

Our innovative thin-film piezoelectric microactuators ensure higher efficiency and lower costs for traditional applications such as inkjet printing, while enabling innovation with MEMS speakers, micromirrors and fluid dispensing technologies.

In 2022, we continued to support the fast development of augmented reality glasses based on our laser beam scanning solution. Together with partners, we offer a reference design and a manufacturing ecosystem that provides a one-stop-shop solution for laser beam scanning systems, including semiconductor technologies, products and reference designs.

Power and energy management

Our technology and solutions for power and energy management enable customers to increase energy efficiency everywhere and support the use of renewable energy sources.



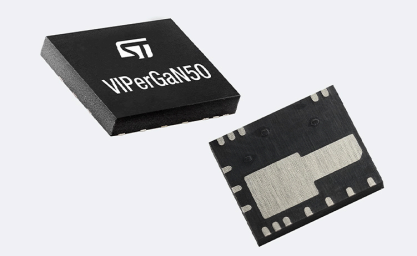
Raising power density and efficiency with SiC and GaN

We offer power discrete devices serving applications across our end markets. Our silicon, silicon carbide (SiC) and gallium nitride (GaN) power devices deliver energy efficiency and enhanced performance to applications in all the end markets we serve.

Other ST products are first choice solutions for high-end power conversion, home appliances, power supplies, and motor control.

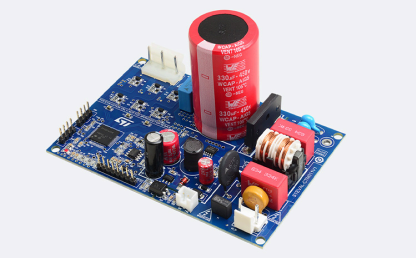
In 2022, we announced innovations in power MOSFETs using an ST proprietary technology. This helps power supply designers maximize power density while supporting compact system dimensions in applications from data-center servers and 5G infrastructure to flat-panel televisions.

GaN converter simplifies energy-saving power designs



We address applications that require generic and application-specific solutions for power management. Our solutions enable energy-saving, high-power-density and lower-standby-power designs. Our offering includes SiC and GaN power discretes, silicon MOSFETs, IGBTs and customized power modules, AC-DC and DC-DC converters, battery management ICs, wireless power ICs, digital controllers, and gate drivers.

One of the innovations we introduced in 2022 is a GaN converter that enables high-efficiency power designs in consumer and industrial applications. The device helps designers leverage GaN technology to support global energy savings. We also introduced a fully integrated controller for smart chargers that allows a significant reduction in the number of components, enabling this type of power supply to become more robust, affordable and more widely adopted throughout the market.



Motor drive reference designs for simplified development

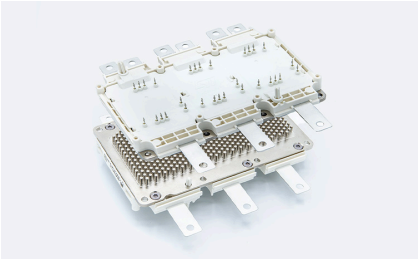
We provide an array of motor control solutions that enable motors to run with higher efficiency and greater precision. We cover the requirements of brushed DC motors, stepper motors and brushless DC motors over an extensive range of voltage and current ratings. We offer highly integrated motor drivers that embed all the functions needed to drive motors efficiently and with the highest accuracy. These include a low-voltage series designed for battery-powered smart devices, and a series embedding an STM32 microcontroller.

In 2022, we released two reference designs that simplify building complete industrial or home-appliance motor drives for compressors. They include the STSPIN32 motor-control System-in-Package (SiP) with the STM32 embedded, and are accompanied by a production-ready PCB design and motor-control firmware.

Smart mobility

To meet the smart mobility needs of our global customer base, we provide products and solutions that serve the key trends in the automotive market – vehicle digitalization and electrification. We enable them to create the next generation of vehicles that are safer, greener, and more connected.

Third-generation silicon carbide solutions for EVs and charging stations



Our wide-bandgap solutions for electric vehicles (EVs) and charging stations enable our customers to create EVs with longer range and faster charging, and that weigh less. We introduced a wide variety of new solutions in 2022, including new silicon power modules that are reliable, robust, and easy for manufacturers to integrate in EV powertrains to boost performance and driving range.

We provide high-efficiency smart power solutions and processors to ensure that every device used to power, control and monitor car subsystems consumes less energy.

Powerful automotive MCUs to support transition to software-defined vehicles

Our automotive microcontrollers support the ongoing transformation of the automotive industry. These range from microcontroller units (MCUs) for cost-sensitive applications to advanced integration MCUs.

In 2022, we announced a new family of automotive microcontrollers targeting electrified drivetrains and domain-oriented, over-the-air-updateable systems that are the foundation of the next generation of EVs.

New hybrid sensor for full vehicle interior monitoring

We provide solutions, together with partners, that make driving safer by reducing traffic-related accidents. These include cutting-edge RF, vision processing systems, vehicle communications solutions as well as in-cabin monitoring solutions.

In 2022, we introduced a cost-effective solution for advanced in-car safety and comfort. The new hybrid sensor for full interior monitoring combines the sensitivity and high resolution of infrared sensing with high dynamic range (HDR) color imaging in a single component.

New driver to power next-generation automotive lighting

We offer ICs dedicated to body and convenience solutions, including body control modules and car lighting systems, as well as ASIC and ASSP solutions for engine control. Our in-vehicle telematics and infotainment systems cover high-end integrated platforms, digital radio, audio power amplifiers, and satellite navigation receivers.

In 2022, we introduced an integrated driver solution for dynamic automotive lighting control using the lightweight CAN FD Light protocol. The new driver is ideal for use with OLED lamps and lets designers produce complex light patterns and effects that enhance safety and styling.

Significant events

Throughout 2022, there were several events which demonstrated our progress, collaboration, and success. Here are some notable highlights.

FD-SOI industry alliance

In April 2022, ST, CEA, Soitec, and GlobalFoundries announced a new collaboration to define the industry's next-generation roadmap for fully depleted silicon-on-insulator (FD-SOI) technology. FD-SOI offers substantial benefits for designers and customer systems including lower power consumption and easier integration of additional features such as connectivity and security, a key feature for automotive, IoT and mobile applications.

Capital Markets Day

In May 2022, we hosted our annual Capital Markets Day in Paris (France). We outlined the path towards our US$20 billion+ revenue ambition and communicated details about our latest developments to stakeholders. These included market trends, growth opportunities, and our approach to sustainability.

Cooling system in Singapore

As part of our commitment to becoming carbon neutral, ST signed an agreement with SP Group, Singapore's national grid operator, in May 2022. We will install Singapore's largest industrial district cooling system at our manufacturing site in Ang Mo Kio. The project has an estimated value of US$370 million and will result in a 20% saving in cooling-related energy consumption.

60th anniversary of Catania site

In June 2022, our site in Catania (Italy), celebrated its 60th anniversary with stakeholders and the city at large. The all-day event took place in the Piazza Università and was an opportunity to let people know about our key activities and strategy. Visitors could explore different stands focused on the pillars of our sustainability strategy. Highlights included a virtual tour of the wafer fab and a selection of 50 customer products across all technology domains.

New 300mm manufacturing facility in France

In July 2022, ST signed a memorandum of understanding with GlobalFoundries to create a new, jointly operated 300mm semiconductor manufacturing facility adjacent to our existing 300mm facility in Crolles (France). The new facility will be a substantial contributor to global digital and green transformations, delivering key enabling technologies and products.

Electronique 2030 program launch in France

In July 2022, our Crolles site (France) hosted French President Emmanuel Macron, several government ministers and European Commissioner Thierry Breton for the launch of the French 'Electronique 2030' program. The program is part of an investment plan that aims to maintain France's position as a leader in the global electronics sector and address current and future challenges in electronics, from upstream research to applications, notably linked to digitalization, electrification and decarbonization.

Silicon carbide substrate manufacturing facility in Italy

ST is building an integrated silicon carbide (SiC) substrate manufacturing facility in Catania (Italy). The project will support increasing demand from customers for SiC devices across automotive and industrial applications as they transition to electrification and seek higher efficiency. The facility will be the first of its kind in Europe for the volume production of 150mm and 200mm SiC epitaxial substrates, integrating all steps in the production flow. Initial production is expected to start in 2023.

ST joins Global Semiconductor Alliance

Our President and CEO, Jean-Marc Chery, was welcomed to the board of directors of the Global Semiconductor Alliance (GSA) in October 2022. The GSA board assists in steering the organization's vision of providing a comprehensive global perspective and commitment to fostering collaboration, innovation and integration for the industry and across the ecosystem.

Semiconductor Climate Consortium

ST was among the founding members of the new Semiconductor Climate Consortium in November 2022. The group was formed by over 65 companies across the semiconductor value chain to accelerate the ecosystem's reduction of greenhouse gas emissions. Founding members have affirmed their support of the Paris Agreement and are aligned on the need to drive climate progress within the semiconductor value chain.

2022 highlights

460
supplier responsibility audits since 2015

79%
of ST employees covered by RBA audits

-40%
GHG emissions scope 1 & 2 since 2018

CARBON NEUTRAL

DJSI
included in World and Europe indices

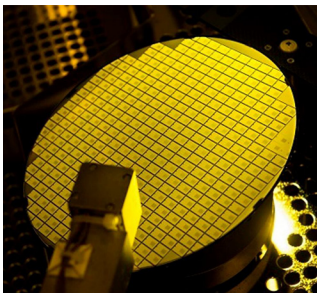
CDP
DISCLOSURE INSIGHT ACTION
A LIST 2022
WATER

100%
of our products are conflict-mineral free

100,000+
beneficiaries of our STEM your way program

186
R&D partnerships

0.10
Recordable case rate for employees – among the best-in-class



86%
employee engagement rate

30%
of women hired in management and engineering positions

77%
of new products identified as responsible

by ST
SUSTAINABLE TECHNOLOGY

660+
community initiatives worldwide

95%
of waste reused, recovered or recycled

62%
of renewable electricity

13,700+
people trained in diversity and inclusion

Our sustainability goals

Sustainability goals (SG)		Progress	Result in 2022
We create technology for a sustainable world			
SG1	Generate at least 20% of our revenues from new product lines by 2025.		13%
SG2	Generate at least 33% of our revenues from our Sustainable Technology's most advanced responsible products by 2027.		23%
We prioritize people			
SG3	Reach a Recordable Case Rate of 0.15% or less by 2025 (work-related injuries and illnesses, including contractors).	✓	0.12%
SG4	Maintain our Severity Rate at 2% or less each year (work-related injuries and illnesses, including contractors).	✗	2.4%
SG5	Get 100% of ST's largest manufacturing sites recognized for social responsibility by external international bodies by 2025.		91%
SG6	Engage employees in deploying STEM partnerships in 20 countries by 2025.		12 out of 20 countries
SG7	Recruit at least 30% women in all exempt positions every year.	✓	30%
SG8	Reach at least 20% women in every management level by 2025.		20% (experienced managers) 15% (directors and senior managers) 13% (executives)
We protect the planet			
SG9	Be carbon neutral by 2027 in all direct and indirect emissions from scope 1 and 2, and focusing on product transportation, business travel and employee commuting emissions for scope 3.		972KT net CO_2 eq emissions
SG10	Adopt 100% renewable energy sources by 2027 through energy procurement and green energy installations.		57% of total energy (62% of total electricity)
SG11	Implement programs to reduce energy consumption by at least 150GWh per year by 2027.		24GWh saved in 2022 112GWh saved since 2018
SG12	Reduce energy consumption per wafer by 20% in 2025 vs 2016.	✓	-20%
SG13	Improve our water efficiency by 20% by 2025 vs 2016.		-12%
SG14	Recycle at least 50% of the water used each year.	✗	42%
SG15	Ensure an annual landfill waste rate below 3%.	✗	3.7%
SG16	Reuse or recycle 95% of our waste by 2025.	✓	95%
We generate long-term value for all stakeholders			
SG17	Ensure every year that 100% of our employees have access to and are aware of our Ethics Hotline.	✓	100% have access For awareness actions see **Ethics and compliance**
SG18	Ensure every year that 100% of exempt employees sign an agreement to comply with our Code of Conduct and related procedures.		99%
SG19	Follow highest standards for 100% of the materials we use: Hazardous Substances Process Management (IECQ080000) and responsible sourcing initiatives, such as RMI.		HSPM: 95% RMI: 100%
SG20	Conduct an annual risk assessment of our supply chain and audit 100% of our high-risk suppliers by 2025.		Risk assessment conducted Audit: 36.4% with valid audit (2 year cycle – 195 out of 535 facilities at risk)
SG21	Further reduce defects by 20% per production unit by 2027 (vs 2020).		-17%
SG22	Achieve an employee engagement rate of at least 10 percentage points above local norms in all major countries by 2025.		3 out of 13 countries
SG23	Annually report our progress on all our long-term goals, following the most advanced standards.	✓	Sustainability reporting according to GRI, SASB, TCFD, UNGC, SDG
SG24	Maintain certification for 100% of manufacturing sites (ISO 14001, ISO 45001, ISO 14064, ISO 50001).		86%

Awards 2022 overview

Every year, we receive external recognition for our approach to sustainability. Here are some examples from 2022.

Top 100 global innovator

ST was recognized as a Top 100 Global Innovator™ by Clarivate™. This is an annual list that recognizes organizations across the globe for excellence and consistency in innovation. ST was acknowledged as a technology innovator in smart power technologies, edge AI solutions, and MEMS sensors, among other areas.

Outstanding semiconductor company

ST was named '2022 Outstanding EMEA Semiconductor Company' by the Global Semiconductor Alliance in its annual awards. This prestigious award recognizes semiconductor companies that have demonstrated excellence through their success, vision, strategy, and future opportunities in the industry.

Industrialist of the year

Jean-Marc Chery, our President and CEO, was recognized as 'Industrialist of the Year' by the French industry magazine, L'Usine Nouvelle. This annual award is presented for economic, industrial or sustainable achievements. The trophy was presented by Bruno Le Maire, French Minister of the Economy and Finance, at the prestigious industry event, Les Assises de l'Industrie 2022.

Most influential person in OHS

CS Tan, site manager at ST Muar (Malaysia), received an award for most influential person in occupational health and safety (OHS) at the Malaysian OHS Professionals Association. The award acknowledges his outstanding commitment to health and safety, as well as the implementation of a unique OHS system at ST Muar to facilitate a safe and healthy workplace.

Decarbonization award

Our Bouskoura site (Morocco) received a decarbonization award from the Moroccan Trade Association as part of its Industry Awards 2022. The site was recognized for its outstanding achievements in decarbonization, contribution to industrial development, and positive socio-economic impact. The site has carried out several sustainability projects, including the installation of photovoltaic panels and the procurement of green energy from wind farms.

Women in industry

Two of our employees from Crolles (France) received awards at the 'Women in Industry' awards 2022 organized by the French industry magazine, L'Usine Nouvelle, acknowledging their outstanding achievements and commitment to innovation. Sandra Levasseur received the Women in Manufacturing trophy and Emmanuelle Serret received the Women in R&D trophy.

Commitment to sustainability

Our Catania site (Italy) was recognized by the cultural association Carretto Arte Sicilia for its dedication to sustainability. The site's commitment to accelerating safer, smarter, and greener living was highlighted, along with its overall mission to act together in protecting the planet.

Top employer in France and Italy

ST was recognized as one of the Top Employers 2023 (based on 2022 performance) in both France and Italy by the Top Employers Institute. These awards recognize our human resources best practices focused on employees and candidates, as well as our numerous initiatives to improve well-being and develop skills.

top EMPLOYER ITALIA ITALY 2023
CERTIFIED EXCELLENCE IN EMPLOYEE CONDITIONS

Best Employers and Best Employers for Women in Italy

At the end of 2022, for the second year running, ST Italy was listed as one of Italy's Best Employers 2023 and Italy's Best Employers for Women 2023 (based on 2022 performance). Awarded by the German Quality Institute ITQF and its media partner La Repubblica Affari & Finanza, the ranking is based on social listening on a huge database of Italian employers.

Istituto Qualità Tedesco ITQF
TOP JOB
BEST EMPLOYERS
la Repubblica
Affari&Finanza
2022/23

Sustainability awards

ST won three awards – global sustainability, best energy efficient industrial semiconductor product, and most innovative product – at the Electronics Maker Best Awards 2022. The awards recognized our vision and efforts to enhance product differentiation, and create value through innovation.

CSR award

Our site in Rousset (France) was awarded the Corporate Social Responsibility award at the Sustainable Industry Trophies organized by the French industry magazine, L'Usine Nouvelle, in Paris. The judges selected ST for its student experience program, which aims to raise awareness of jobs in Science, Technology, Engineering, and Mathematics (STEM).

Best EMAS declaration award

Our Agrate and Castelletto (Italy) sites received the best environmental declaration award from the Ministry of the Environment in June 2022. The sites were recognized for their commitment to communicating policies and environmental programs with transparency and clarity. An interactive version of the declaration was also created with films and graphic effects.

Living our values

DJSI
included in World and Europe indices

Speak up
Culture

24
sustainability goals

Governance

LIVING OUR VALUES

Our corporate governance structure and policies reflect best practice, promoting a consistent, ethical business culture.

44%
women on the Supervisory Board

10
Supervisory Board meetings

100+
sustainability champions

ST headquarters, Geneva, Switzerland

ST has a long-standing commitment to operating in accordance with best practice corporate governance principles. We have adopted policies that consider the interests of our stakeholders and cover important issues, such as business ethics and conflicts of interest. Our corporate governance statement and policy objectives support our efforts to foster an ethical business culture that is consistent throughout the organization.

Corporate governance structure

ST's parent company, STMicroelectronics NV, is registered in the Netherlands and is listed on the New York Stock Exchange (NYSE), Euronext Paris, and Borsa Italiana, Milan. Our headquarters and operational offices are managed through our wholly owned subsidiary, STMicroelectronics International NV, located in Plan-les-Ouates, Geneva, Switzerland. Our operations are also conducted through our various subsidiaries. These are organized and operated according to the laws of their respective countries of incorporation and consolidated by STMicroelectronics NV.

We have a two-tier governance structure, in accordance with Dutch law. Our management is entrusted to our Managing Board under the supervision of our Supervisory Board.

Our corporate governance policies and practices are outlined in our Corporate Governance Charter, Supervisory Board Charter, and Managing Board and Executive Committee Charter. These charters are available in the corporate governance section of our website see **investors.st.com** . | 2-1 |

Supervisory Board

Our Supervisory Board is responsible for supervising the policies pursued by our Managing Board and supporting the Managing Board with its advice. It also oversees the Managing Board's implementation of long-term value creation and the general course of affairs and business at ST.

Our Supervisory Board is a separate and independent body that comprises nine non-executive members (four women and five men), each appointed at our Annual General Meeting of Shareholders. Members are carefully selected in accordance with our Supervisory Board Charter, the Profile of the Supervisory Board and the Diversity Policy adopted by our Supervisory Board. Skills, expertise, and soundness of judgment are among the competencies required from members of our Supervisory Board. The composition of our Supervisory Board also aims to be diverse in terms of characteristics such as nationality, experience, background, gender, and age. Further information can be found in the corporate governance section of our website (see **Corporate Governance – STMicroelectronics NV**).

Our Supervisory Board is assisted in its duties by five standing committees, which are independent from the Managing Board and senior management.

5

standing committees

- Audit Committee
- Strategic Committee
- Compensation Committee
- Nomination and Corporate Governance Committee
- Sustainability Committee

Our Supervisory Board met 10 times in 2022, with an average attendance rate of 90.5%. Full details of attendance at meetings of the Supervisory Board and its committees are shown in our annual report on Form 20-F, and in our statutory annual report. I 2-9 I

Managing Board

Our President and CEO, Jean-Marc Chery, is the sole member of our Managing Board. An Executive Committee acts under the authority and responsibility of the Managing Board, and in this respect manages the Company. Jean-Marc Chery also chairs our Executive Committee.

The other members of the Executive Committee are:

- Orio Bellezza, President, Technology, Manufacturing, Quality and Supply Chain
- Marco Cassis, President, Analog, MEMS and Sensors Group, and Head of Strategy, System Research and Applications, Innovation Office
- Rajita D'Souza, President, Human Resources and Corporate Social Responsibility
- Remi El-Ouazzane, President, Microcontrollers and Digital ICs Group
- Lorenzo Grandi, President, Finance, Purchasing, ERM and Resilience, Chief Financial Officer
- Marco Monti, President, Automotive and Discrete Group
- Steven Rose, President, Legal Counsel
- Jerome Roux, President, Sales and Marketing

Their biographies can be found in the 'About ST' section of our website (see **www.st.com**). I 2-9 I

Corporate Audit

Corporate Audit is strictly independent from corporate and local management. Its primary objective is to enhance and protect organizational value by providing risk-based and objective assurance, advice, and insight.

Franck Freymond, Executive Vice President, Chief Audit and Risk Executive, is the Head of Corporate Audit. He reports directly to the Audit Committee of our Supervisory Board and attends quarterly meetings with the Audit Committee and senior management.

Current functional reporting lines and practices ensure he has the appropriate level of organizational independence and unrestricted access to senior management and the Supervisory Board.

Independent audit function

The internal audit process is based on a formal and structured audit methodology, which ensures a risk-based approach. Corporate Audit activities are coordinated with other risk assurance functions within the Company, allowing effective risk coverage.

Corporate Audit performs its activities in accordance with the International Standards for the Professional Practice of Internal Auditing, published by the Institute of Internal Auditors.

Sustainability governance

Sustainability is central to ST's business model and is a key consideration at all levels of the organization.

Our Managing Board is responsible for directing and our Supervisory Board for overseeing our sustainability roadmap, considering both risk and opportunity.

Our Executive Committee holds quarterly meetings attended by our President and CEO, Presidents, and Executive Vice Presidents to review sustainability performance and targets. I 2-12 I

Supervisory Board Sustainability Committee

In 2022, our Supervisory Board established a Sustainability Committee with the aim to support and advise them on sustainability strategy, goals, and performance.

The responsibilities of the Sustainability Committee include:

- monitoring and advising on sustainability policies and practices, including, but not limited to, social and environmental
- monitoring and assessing sustainability developments and emerging trends in the semiconductor industry
- reviewing stakeholder feedback relating to sustainability
- monitoring the sustainability performance of the Company
- reviewing and advising on the Company's sustainability report
- monitoring and advising on the Company's sustainability strategy, targets, goals and overall sustainability performance
- monitoring alignment between our corporate strategy and sustainability strategy

The Sustainability Committee met four times in 2022. These meetings focused on reviewing the pillars of our sustainability strategy and assessing future considerations for sustainable progress. In addition to the regular agenda, there were expert-led sessions on key focus areas, such as reporting, climate change, product stewardship, and diversity, equity and inclusion.

Our executive Sustainability Council, composed of 14 vice presidents, helps validate strategy and maintain alignment, as well as ensuring the means are in place to deploy the relevant corporate programs. Going forward, the council will be expanded to include sustainability champions from across the organization. In addition, each site has a local sustainability committee responsible for overseeing its sustainability roadmap.

The Corporate Sustainability department is responsible for developing our sustainability strategy and programs. It is supported by a network of over 100 sustainability champions who manage the programs and monitor our performance across all our sites and organizations.

ST has been a signatory of the United Nations Global Compact since 2000 and a member of the Responsible Business Alliance since 2005.

I 2-12 I 2-13 I 2-14 I

Ethics and compliance

LIVING OUR VALUES

Integrity, respect and accountability are central to the decision-making process and culture at ST.

5
dedicated ethics committees

Zero
tolerance approach to bribery and corruption

99%
eligible employees signed Code of Conduct

Putting integrity, respect and accountability at the core of our decision-making process is vital to support our ambition, create value and earn the trust of our stakeholders. These values are some of our most important assets and an integral part of our long-term strategy.

Our vision speaks for itself: we want to be everywhere microelectronics brings a positive contribution to people's lives. We must reflect this in everything we do. We believe ethics and compliance are everyone's job and responsibility, and that conducting our business with the highest ethical standards is critical to our long-term success.

Code of Conduct

Our Code of Conduct is all about our values, which are shared throughout the Company. It sets clear expectations for our employees and other stakeholders, helps to foster a culture of integrity, and provides practical guidance on the way we conduct our business and make our decisions.

- **Integrity**: we conduct our business with the highest ethical standards, honor our commitments, and keep our promises; we are loyal and fair and stand up for what is right.
- **People**: we behave with openness, trust, and simplicity; we are ready to share our knowledge, encourage everyone's contribution, develop our people through empowerment, teamwork, and training; every one of us is committed and personally involved in the continuous improvement process.

- **Excellence**: we strive for quality and customer satisfaction and create value for all our partners; we are flexible, encourage innovation, develop our competencies, seek responsibility and are accountable for our actions; we act with discipline, base our decisions on facts, and focus on the priorities.

In 2022 we released an Addendum to our Code of Conduct. The purpose of this Addendum is to provide supplementary guidance and practical information in order to further help prevent and detect risks related to corruption or influence peddling. It also includes specific recommendations regarding charitable donations or sponsorship, gifts meals and entertainments, and other risky situations that employees may encounter.

Our Code of Conduct and its Addendum are distributed to all our employees, including newcomers. They are available on our website (see **www.st.com/code_of_conduct**), our ST Integrity app, and in 10 languages on our intranet. I 2-23 I 2-24 I 2-27 I

Yearly declaration

In 2022, we successfully ran a worldwide campaign asking all eligible employees to sign and confirm our business ethics declaration, in line with the values and principles described in our Code of Conduct. Employees who have not completed their yearly declaration are contacted to understand the reasons behind and, as applicable, identify any follow-up action plan.

E-signature of Code of Conduct[1] (%)

2018	2019	2020	2021	2022
97	98	99	97	**99**

[1] Percentage of eligible employees (all employees in the exempt category).

Training

Following up on our initiative started in 2021 to update our training modules with high quality distance learning and an excellent user experience, in 2022 we deployed our new e-learning modules focusing on topics such as: anti-bribery and corruption, conflict of interest, anti-harassment and discrimination, and insider trading. These e-learnings enable users to take an active role in their training through practical cases and quizzes. Accessible via our training platform, they are available in 10 languages and include a glossary and quick access to other useful resources. Overall, our training and e-learning programs were taken by more than 24,500 employees in 2022.

Communication and awareness

We continued to deploy our Compliance, Ethics and Privacy multi-channel communication and awareness strategy, via our intranet pages (generating more than 96,000 views), through our mobile application ST Integrity, and our Yammer community 'Building Trust Together'. Compliance, Ethics and Privacy was also a topic of interest for external users in 2022, leading to more than 80,000 views on our Code of Conduct page and Privacy portal available on our public website. Finally, we participated for the third time in the Distribution and Sales Convention for Asia Pacific, with more than 900 business partners in attendance physically and virtually.

Philippe Dereeper
Chief Compliance Officer and Executive Secretary of the Supervisory Board

By designing an effective compliance, ethics and privacy program and promoting a culture of integrity, respect and accountability, we are creating long-term value for all our stakeholders."

Privacy

We respect the privacy of our stakeholders, including our employees, in the way we collect and use their personal data.

During 2022, we further strengthened our data protection program by ensuring uniformity across all ST's legal entities wherever located by adopting the EU GDPR to put human beings at the center of our privacy practices. Thus, we harmonize data protection law across our global presence while leaving some discretion to follow the data privacy laws of certain countries or states (such as the US states of California, Connecticut, Colorado, Utah and Virginia who have developed their own data protection and privacy laws). At country level, 2022 was a year in which China's data protection legislation was further refined. Although, we continued to manage and process data subjects' access and deletion requests via our generic email **privacy@st.com** , we have not received any complaints on privacy breaches during 2022.

Bribery and corruption

We have a zero-tolerance approach towards any forms of bribery and corruption, regardless of the identity or position of the originator or recipient of the bribe. It is also strictly forbidden for anybody in ST to use Company funds or assets to make a political contribution.

Zero tolerance

towards bribery and corruption

This applies to all our employees, organizations and third parties acting on behalf of ST and all transactions in any country where we operate and do (or seek to do) business. Any violation will be deemed a serious violation of our Code of Conduct and lead to disciplinary action, including termination of the relationship with ST.

Our Anti-Bribery and Corruption policy (see **investors.st.com/highlights**) provides clear definitions regarding instances of bribery and corruption and includes detailed descriptions of the Company's rules for engaging with third parties. It also explains how to report actual or suspected violations and outlines the potential disciplinary actions and legal consequences of any non-compliance.

Speak up and misconduct reporting

Our position is clear: we encourage everyone, including external business partners, to express any concerns they might have regarding possible violations of our Code of Conduct, our policies, or the law. Managers are accountable for maintaining a working atmosphere where employees are comfortable speaking up and expressing their concerns freely. All concerns raised are taken seriously.

See something?

Say something!

Our speak up process is communicated to all employees through, among other things, our Code of Conduct, dedicated intranet web pages and our ST Integrity app. In addition, in 2022 we replaced our previous hotline with a new independent multilingual Ethics Hotline, which is available 24/7 online or via phone. A link to our Ethics Hotline is accessible on our intranet, our website (see **www.st.com**), many communication and training materials, and our ST Integrity app. It can be used by any employee, business partner or stakeholder.

We apply the highest standards of confidentiality in handling all reports received, and we ensure that no employee who reports a concern in good faith suffers retaliation in the form of harassment, or adverse employment or career consequences. I 2-25 I 2-26 I

Misconduct reporting

	2021	2022
Number of cases	80	**102**
Number of incidents under review as of January 1st	7	**7**
Number of incidents reported during the year	73	**95**
Number of cases per category		
Asset misappropriation	9	**3**
Bribery and corruption	12	**11**
Fraudulent statements	0	**0**
Harassment and other behavioral issues	42	**66**
Environment, health and safety issues	0	**2**
Data privacy	0	**0**
Insider trading	0	**0**
Other	17	**20**
Cases closed after a preliminary assessment or formal investigation	73	**85**
Number of confirmed external misconduct cases	1	**5**
which led to terminating contracts with business partners	0	**4**
Number of confirmed internal misconduct cases	23	**29**
which led to employees being dismissed or disciplined	22	**28**
Incidents still open at year end	7	**17**
Number of litigations or investigations conducted by authorities regarding corruption against ST or its employees	0	**0**

Ethics committees

The purpose of our Corporate Ethics Committee is to support ST management in its efforts to foster a consistent ethical culture across all regions, functions, and organizations. Formed in 2007 and chaired by our Chief Compliance Officer, Philippe Dereeper, the committee comprises senior managers representing various ST organizations, appointed for three-year terms by our President and Chief Executive Officer.

The role of the Corporate Ethics Committee includes:

- evaluating the principles in our Code of Conduct, with reference to our culture and commitment to business ethics
- reviewing the main ethical breaches, allegations, and related investigations
- providing guidance on ethical dilemmas that may be faced by the Company, upon request from our Managing Board or our Chief Compliance Officer
- promoting and coordinating the activities of our four local ethics committees in France, Italy, Asia Pacific and the Americas

Our four local ethics committees contribute to this mission within their respective geographical areas. Their activities are complementary to the Corporate Ethics Committee, with which they are in regular communication. I 2-16 I

Annual sustainability goal	Status	Comments
SG17: Ensure every year that 100% of our employees have access to and are aware of our Ethics Hotline.	✔	100% have access For awareness actions see Ethics and compliance
SG18: Ensure every year that 100% of exempt employees sign an agreement to comply with our Code of Conduct and related procedures.	◌	99%

Risk management

Risk management is embedded throughout our organization to provide resilience, agility and growth.

ERM
global approach

12
'priority 1 risk areas'

100+
ERM and resilience champions

Our tailored enterprise risk management approach

As a company operating globally in the semiconductor market, we are exposed to risks of increased volatility, uncertainty, complexity, and ambiguity, particularly in light of current geopolitical instabilities. For a description of ST's risk factors, please refer to the relevant section in our 2022 annual report Form 20-F and our 2022 statutory annual report including IFRS financial statements, available on **investors.st.com** .

Our embedded approach to enterprise risk management (ERM) is formalized in a specific policy and is aligned with ISO 31000. It enables us to:

- set and enable our Company strategy, manage our performance, and capitalize on opportunities
- systematically identify, evaluate, and address specific risk scenarios

ERM process aligned with
ISO 31000

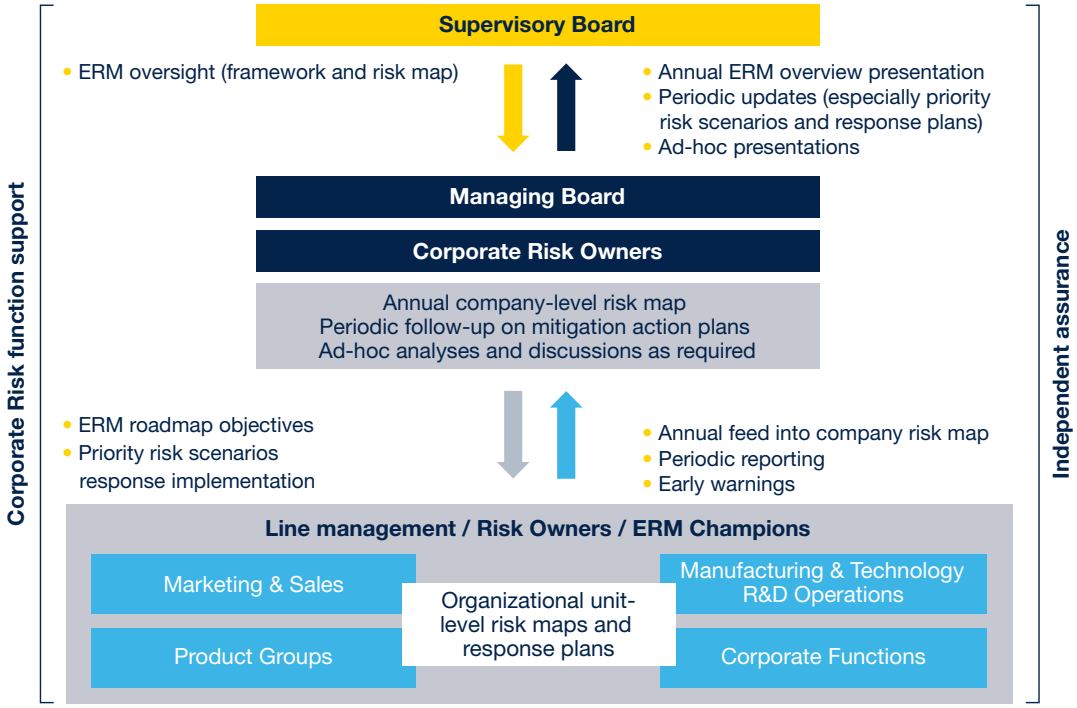
Our ERM improvement roadmap includes deploying our risk framework, which:

- considers the interests of our stakeholders
- addresses uncertainty explicitly
- is pragmatic and tailored to ST
- is an integral part of our processes and decision-making
- is proactive, structured, dynamic, iterative and responsive to change
- is based on the best available information

ST's ERM framework	
Governance, organization and culture	• Risk oversight and governance
	• Risk culture
	• Risk appetite
	• Risk functions and communities
Managing risk and opportunity	• Response to and monitoring of risk and opportunity (enabling strategy and performance)
Risk enablers	• Risk reference documentation (policies and procedures)
	• Risk processes (definition and methodologies)
	• Risk tools

Our risk approach is managed by our Chief Audit and Risk Executive under the direct responsibility of our Managing Board and the oversight of our Supervisory Board. The scope of this oversight role is detailed in our Supervisory Board Charter.

Our risk governance is described in the following chart:



Managing risk

Risk management activities are governed by our risk appetite strategy, which is discussed annually at Supervisory Board and Audit Committee levels.

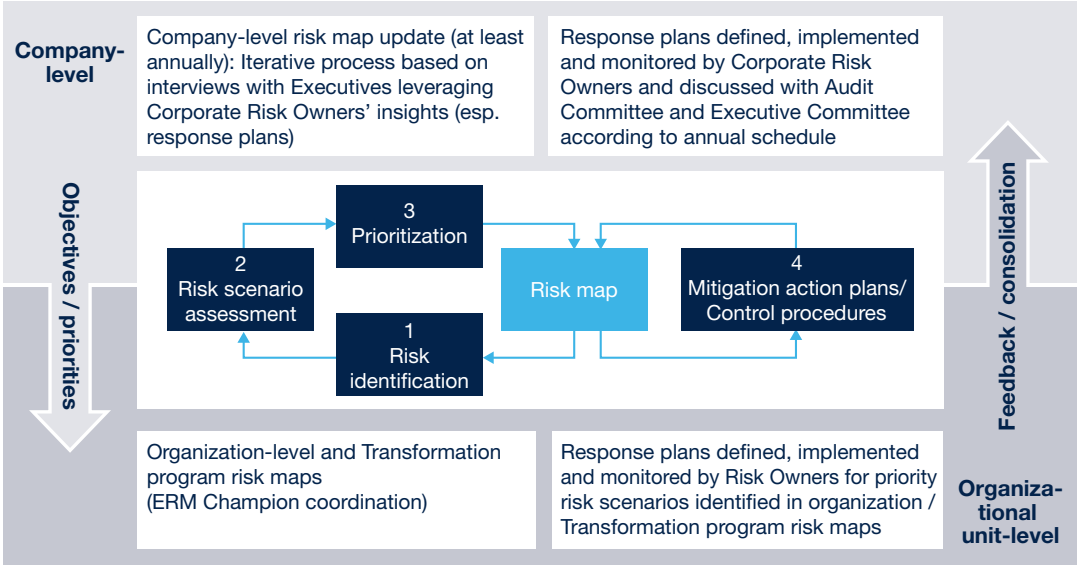
We determine the amount of risk we are willing to pursue or retain, depending on the expected rewards, opportunities, and costs.

Our risk appetite depends on the nature of risks. As an illustration, through well-designed and effective internal controls, we strive to eliminate or mitigate as much as possible the following risk categories:

- corporate governance
- product quality
- operational resilience (internal events)
- protection of intellectual property and other sensitive information
- people, health and safety
- environmental regulations and commitments

- adherence to our Code of Conduct and compliance with applicable laws and regulations
- protection against cyber threats

Our holistic ERM process is embedded company-wide and within more than 20 organizations, to ensure specific risk scenarios are addressed at the right level. By systematically considering the views of numerous executives and external sources, we continually strive to identify and address emerging risks, including those that are externally driven, fast-evolving, or that might be of significance in the medium- to long-term.



During 2022, we refreshed our Company risk assessment with the executive management team. The output from this exercise was a risk map linked to our strategic objectives, including 12 redefined 'priority 1' risk areas.

Risk owners (members of senior management) were appointed for each priority risk area to develop risk response plans, adapt to changing external conditions, and enhance monitoring capabilities. These risk response plans are regularly reviewed by the Executive Committee and periodically discussed with the Supervisory Board and Audit Committee.

Each organizational unit throughout the Company completes its own risk assessment. This includes marketing and sales regions, product groups, manufacturing and technology, and corporate functions.

Improving our resilience

We have extended our risk approach to encompass a dedicated Resilience Management System (RMS), including business continuity and crisis management, to address the following risk factors:

- continuity of major sites
- manufacturing flexibility across internal and/or external sites
- continuity of full supply chain, including third parties
- managing business continuity and crisis communication to clients and other stakeholders
- improving company-wide capability to respond to crises

FOCUS

MANAGING THE CONSEQUENCES OF GEOPOLITICAL DEVELOPMENTS

In 2022, we activated a dedicated Corporate Crisis Team (CCT), reporting directly to the Executive Committee, to steer our response to the Russia-Ukraine conflict and its evolving implications. We have consistently maintained our focus on two overarching priorities:

- first, ensuring the health, safety and security of our people
- second, adapting and executing our business continuity plans, actively managing the situation across our whole supply chain, and working closely with our customers, suppliers, and partners

Learning from the experience gathered during the COVID-19 pandemic, the CCT coordinated our response across all relevant areas, including:

- monitoring international developments
- managing global travel and health and safety (including psychological support)
- monitoring the ST-specific situation and the deployment of measures in our regions/sites
- monitoring our business, supply chain, and manufacturing, in particular sourcing materials and energy, and ensuring compliance with applicable international trade rules and sanctions
- ensuring internal and external communications
- managing continuity for support functions

Franck Freymond
Executive Vice President,
Chief Audit and Risk Executive

In 2022, the COVID-19 pandemic continued to create a fast-moving risk environment that varied according to location. In addition, the Russia-Ukraine conflict in Europe triggered multiple implications, including trade sanctions, disruptions to supply chains, and energy sourcing challenges. We faced multiple challenges requiring the continuous mobilization of our management and our dedicated crisis teams to continue to provide our people with a safe working environment and maintain business continuity. 2022 highlighted our overall resilience in highly volatile conditions requiring constant adaptation."

In 2022, as detailed in our multiyear improvement roadmap, we further embedded the RMS in our main sites and selected organizations, leveraging our Corporate Resilience Competence Center and a global network of resilience champions.

For the first time since 2019, more than 50 resilience champions gathered for a three-day internal conference where best practices and upcoming improvements were discussed. We implemented several incremental improvements to our RMS with fully aligned methodologies and toolkits across ERM, resilience, business continuity, and crisis management. This provides a consistent methodology to address potential business disruptions to our resources, such as:

- site unavailability
- people unavailability
- IT system disruptions, such as cyber-attacks
- critical sourcing and logistics/transportation disruptions

As such, we address scenarios that may affect our supply chain and operations, enabling us to continually improve our continuity plans. Such scenarios include:

- pandemics
- natural hazards (such as earthquakes, floods, snowstorms, volcanic eruptions, or tsunamis)
- industrial accidents (such as fires and explosions)
- facilities and energy interruptions
- major impacts related to human activities (such as geopolitical tensions, terrorism or strikes)

In 2022, we further developed an ST-specific methodology underpinning a global risk management dashboard: a range of relevant indicators based on internal or external standards, covering dimensions such as:

- exposure to natural hazards
- loss prevention
- facilities robustness
- equipment modernization and redundancy
- IT infrastructure
- cyber protection

For major sites, these indicators are compiled in a Site Resilience Index (SRI), which is updated and improved on a quarterly basis. In 2022, our quality laboratories were included in the SRI. Site management teams prepare and update an annual site improvement plan accordingly.

ST has been ISO 22301 certified since 2016. Throughout 2022, our improvements have been subject to both internal audits and recertification audits from the certification body. ST was duly recertified for a three-year cycle until 2025. External surveillance audits and internal audits are scheduled to take place in 2023.

ISO 22301

recertified for 3 years

ST was recognized by Resilinc, a leading supply chain risk management company, as ranking among the top 30 suppliers to the high-tech industry with the best risk programs in place. Suppliers were selected based on their Resilinc R Score®, a patented risk-scoring system that measures supply chain resilience based on key metrics including performance, network resilience, transparency, continuity of supply, and risk program maturity.

Sustainability risks

The identification of our priority sustainability topics is formalized through a regular multistakeholder materiality exercise (see **Sustainability strategy**).

Company-level sustainability risk scenarios are then addressed as part of our ERM program. Our response level corresponds to the level of risk identified. This mapping enables sustainability risks to be fully integrated into the priority risks of the Company.

In 2022, we identified our main focuses and long-term risk mitigation actions as:

- climate change, with specific attention on securing investment for carbon neutrality, maximizing energy savings and renewable energy (see **Energy and climate change**)
- water management with reinforcement of water strategy and policy (see **Water**)

- diversity, equity and inclusion with training developments, diverse networks creation and, monitoring enhancement (see **Diversity, equity and inclusion**)
- human resources programs, to ensure sustainable hiring, retention, and transformation (see **Talent attraction and engagement**)
- health and safety, with specific programs dedicated to well-being and psychosocial risk reduction (see **Health and safety** and **Labor and human rights**)

Other priority topics identified relate to chemicals and pollution management (see **Chemicals**), supply chain responsibility (see **Responsible supply chain**), and new reporting and regulatory standards for people and the environment (for example, **EU Taxonomy**, US and EU forced labor bans).

By identifying these risks and mitigating them through dedicated actions and programs, we can reduce our environmental and social footprint and find new opportunities to create positive value for our Company and our stakeholders.

Sustainability strategy

LIVING OUR VALUES

Sustainability has been engraved in ST's business model and culture for nearly 30 years.

26
years of sustainability reporting

DJSI
included in World and Europe indices

2027
carbon neutrality commitment

Sustainability has been a cornerstone of our business model for nearly 3 decades. We believe our commitment to a sustainable culture is good for people, the planet, business, and society at large. Our ambition is to create sustainable technology for a sustainable world, creating long-term value for all our stakeholders.

Accelerating sustainability, together

Sustainability is embedded throughout our business model. We implement programs to manage our impacts, opportunities, and risks at each step of our value chain. Our guiding principles and 24 sustainability goals are detailed in our sustainability charter. This is endorsed by Jean-Marc Chery, our President and CEO, and is available at **www.st.com/sustainabilitycharter** . Our progress towards these annual, 2025 and 2027 goals is described in this report, with a focus on transparency.

To support our sustainability ambitions, we integrate sustainability objectives into the compensation schemes of our senior executives and employees eligible for incentives. These objectives focus on safety, carbon neutrality, gender diversity, employee engagement, and stakeholder recognition.

As part of our plan to accelerate sustainability and engage our stakeholders, we conducted a series of sustainability workshops in 2022. The goal was to train our executive management, site managers, and sustainability and communication teams on how to engage with internal and external stakeholders on sustainability topics.

ACCELERATING SUSTAINABILITY TOGETHER

Identifying the material issues

We identify the topics that are important for our stakeholders and have a positive or negative impact on the economic, social, and environmental value of our business.

Materiality assessments enable us to prioritize and focus on the most material topics and address them in our strategy, programs and objectives. For each material topic, we define a specific ambition and a long-term goal.

We performed our most recent comprehensive materiality exercise in 2020. We analyzed the global sustainability context, emerging topics, and the role of our industry in identifying our material impacts, risks and opportunities. To assess the importance of each topic and its impact on value, we consulted more than 300 stakeholders, as well as our executive management team. I 2-29 I

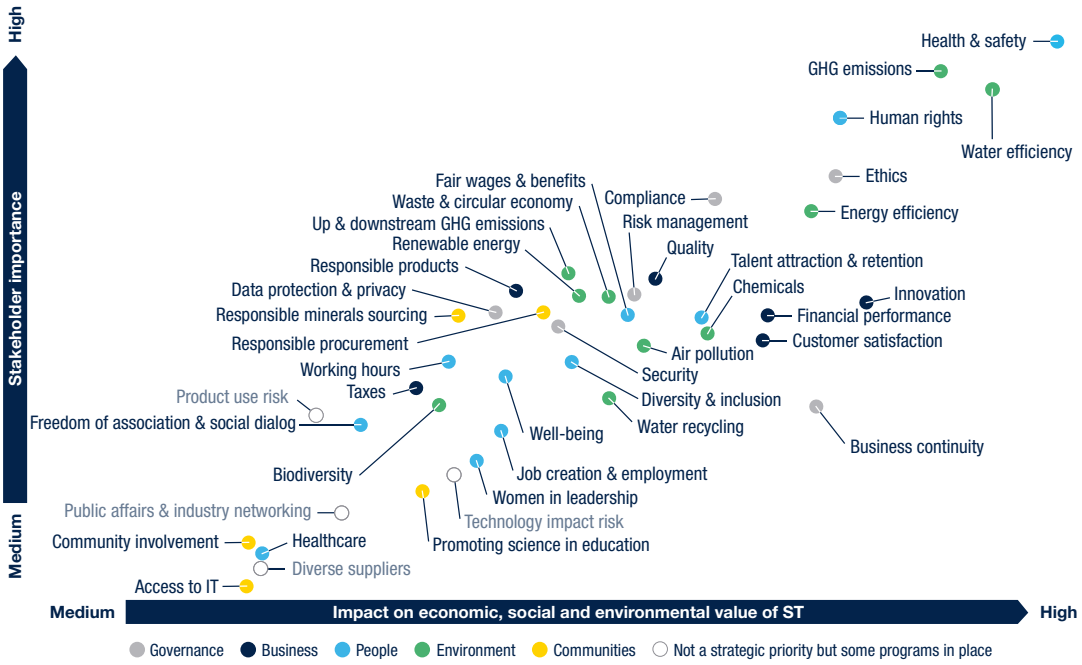
To target our sustainability management efforts, we regularly re-evaluate the results. In 2022, our review included data-driven insights from an AI software platform. With this new approach to materiality analysis, we were able to include a wider range of stakeholders and analysis of data points from public sources, such as corporate financial and sustainability reports, regulations, voluntary initiatives, news, and social media. It helped us compare internal priorities with external risks and opportunities. Based on the results of this assessment, some topics have been re-evaluated in terms of their importance and impact.

The most material topics identified were:

- health and safety
- GHG emissions
- water efficiency
- labor and human rights

We also identified an increase in materiality for some topics, such as risk management, business continuity, and data privacy, for which we already have substantial programs in place. Biodiversity also gained in importance, prompting us to launch a dedicated company-wide program (see **Our approach to the environment**).

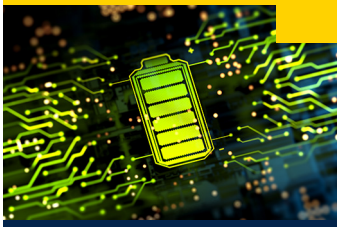
I 3-1 I



Following an in-depth analysis of all inputs, we made a final selection of the most material topics to define our sustainability strategy. In some cases, these topics were combined to reflect our highest priorities as well as the rapidly evolving sustainability environment. I 3-2 I

Living our values
Governance, Ethics and compliance, Risk management,
Stakeholder engagement and commitment to sustainability

Augmenting everybody's life



Sustainable financial performance
Innovation
Sustainable technology
Customer satisfaction

Putting people first

Health and safety
Labor and human rights
Talent attraction and engagement
Diversity, equity and inclusion

Protecting the environment

Energy and climate change
Water
Waste
Chemicals

Acting together
Responsible supply chain, Responsible mineral sourcing, Community and education

Interview

Rajita D'Souza
President,
Human Resources and Corporate Social Responsibility

What defined sustainability at ST in 2022?

The global energy crisis delivered a fresh set of challenges within an already complex environment. At ST, we have been integrating sustainability into our business model and operations for nearly 30 years. We have an established approach to energy management, which is a key pillar of our carbon neutrality program. In 2022, we were well positioned to accelerate our energy-saving efforts and we established energy crisis teams in France and Italy ahead of official government requirements. Monitoring our carbon footprint is critical, but we are increasingly focusing on the carbon handprint of our products and actively developing solutions for a more sustainable society at large.

We believe it is our people who help us achieve our goals. To support this, we have continued to work on our transformation programs to drive positive change across the Company. To help us develop a key pillar of our human resources transformation program, we dedicated our employee survey to diversity, equity and inclusion. This will help us identify and focus on what needs to change going forward, so we can work together more effectively.

How is ST engaging internal and external stakeholders in sustainability?

We view sustainability as a collective responsibility. Engaging with our stakeholders plays a vital role in helping to prioritize and accelerate our sustainability strategy. We involve our customers, suppliers, and partners in our materiality exercise by gathering their feedback on key issues to be incorporated into our strategy. This allows us to support their expectations.

During 2022, we launched our sustainability messaging platform, which delivers targeted sustainability training and awareness programs to employees, including site managers, EHS representatives and sustainability champions. This helps reinforce alignment and creates a common core of knowledge. It also allows our sites to create sustainability roadmaps and convey this information to all stakeholders effectively.

I am also delighted that there have been so many local events, such as sustainability and EHS weeks, and sustainability challenges, which all help to raise awareness and motivation across the Company. We are very proud of the scope of many initiatives, such as 'Break the bias in STEM'. This series of external webinars aimed at ending gender discrimination in science in schools reached 15 countries in 2022.

What will influence the sustainability roadmap at ST going forward?

We will continue to observe global trends and consider our stakeholders' expectations. Thanks to our proactive approach, we are well positioned to respond to growing external priorities, such as biodiversity and the demand for green applications and responsible products. To maintain this status, it is essential we continue to attract and nurture talent across the organization.

ST has been reporting its environmental impacts since 1998. During this time, the regulatory landscape has evolved significantly. We have laid solid foundations in this area which enable us to fulfill new requirements and strive for even greater transparency.

Stakeholder engagement

Proactive engagement with both internal and external stakeholders is essential to us. By maintaining regular and open communication, we can measure our impacts to evolve in line with expectations and create long-term value.

Our diverse range of stakeholders includes employees, customers, suppliers, investors, and industry associations. To help us work towards common goals, we collaborate through a broad range of channels, across all levels of the Company. These vary across our sites according to the size and activity of the location, as well as cultural and language differences, where appropriate.

Stakeholders	Key expectations	How we engage
EMPLOYEES	• Health and safety at work • Respecting human rights • Ethics	• Employee surveys and workshops • Training • Intranet with global and local content
CUSTOMERS	• Health and safety at work • Respecting human rights • Greenhouse gas emissions	• Trade shows and Technodays • Seminars, conferences, workshops • Site visits, meetings, audits
INVESTORS & ANALYSTS	• Health and safety at work • Greenhouse gas emissions • Talent attraction and retention	• Capital Markets Day • Regulatory filings and sustainability report • Extra-financial questionnaires and meetings
SUPPLIERS	• Health and safety at work • Ethics • Respecting human rights	• Adherence to ST Code of Conduct • Supplier training • Audits and interviews
LOCAL PARTNERS AND COMMUNITY	• Respecting human rights • Greenhouse gas emissions • Health and safety at work	• Partnerships • Conferences, conventions, meetings • Donations, training, volunteering, local initiatives
NATIONAL AND LOCAL AUTHORITIES	• Ethics • Greenhouse gas emissions • Respecting human rights	• Partnerships with municipalities • Correspondence and visits • Annual reports
ACADEMIC INSTITUTIONS AND LABORATORIES	• Ethics • Respecting human rights • Product and technology innovation	• Internships, scholarships, PhDs • Joint R&D projects, joint labs • Conferences, technical seminars
INDUSTRY ASSOCIATIONS	• Ethics • Respecting human rights • Renewable energy	• Public-private partnership activities • Participation in industry consortiums and working groups • Meetings, conferences, seminars
MEDIA	• Fair wages and benefits • Greenhouse gas emissions • Renewable energy	• Press releases and interviews • Conferences and conventions • Social networks

We organize numerous events and activities throughout the year, both formal and informal. In May 2022, we hosted our annual Capital Markets Day for our financial stakeholders, where we could share details about our latest developments, including market trends, growth opportunities, and sustainability strategy.

In June 2022, our Catania site (Italy) celebrated its 60th anniversary with stakeholders and the city at large. The all-day event took place in the Piazza Università and was an opportunity to raise awareness about our activities and the pillars of our sustainability strategy.

Visitors could explore different stands, including a virtual tour of the wafer fab and a selection of 50 customer products across all technology domains. Many ST programs were showcased, such as carbon neutrality; diversity, equity and inclusion; STEM your way; and the activities of the ST Foundation. The event was attended by our President and CEO, Jean Marc Chery, external authorities, partners, and the wider community, providing an opportunity for everyone to share in the celebrations around this significant milestone.

We value the different perspectives of our team members and encourage open dialog and honest feedback. To ensure our employees feel informed and part of our community, we regularly share news and updates throughout the Company. Our President and CEO provides official updates through CEO calls and videos, while localized news and events are published on our intranet and via social media channels.

During the verification process for this report, external auditors interviewed three key stakeholders (a non-profit organization, a partner, and a supplier), to gain valuable insights into their views of ST. This helps us maintain a balanced perspective, assess the effectiveness of our actions, and consider the views of our stakeholders going forward.

I 2-29 I

Contributing to the Sustainable Development Goals

The Sustainable Development Goals (SDGs) set by the United Nations define global sustainable development priorities and aspirations for 2030, highlighting the world's biggest social and environmental challenges. As a multinational company, we are convinced we have a responsibility and a role to play to help achieve these goals. We mapped the 17 SDGs to our material topics and business strategy. We then identified the 11 goals that are most relevant to our sustainability strategy. Our performance against these SDGs is highlighted throughout this report.

Good health and well-being

- We aim to ensure healthy lives and well-being for all.
- We are engaged in minimizing risks of negative impact on people due to our activities.

3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all

Health and safety, **People indicators**

3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

Waste, **Chemicals**, **Environmental indicators**

Ensure inclusive and quality education for all and promote lifelong learning

- We support education in all the countries where we operate.
- We develop the competence of our employees through a blended approach.

4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university

Talent attraction and engagement, **Community and education**, **People indicators**, **Community indicators**

Achieve gender equality and empower all women and girls

- We aspire to achieve full gender equality.
- Our Women in Leadership program prepares the next generation of women leaders.

5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life

Diversity, equity and inclusion, **People indicators**

Clean water and sanitation

- We are committed to reducing our water consumption and recycling more.
- All our wastewater is treated before being discharged into the environment.
- We strive for zero waste in landfill.

6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

Waste, **Chemicals**, **Environmental indicators**

6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity

Water, **Environmental indicators**

Ensure access to affordable, reliable, sustainable and modern energy for all

- We deploy programs to improve energy efficiency in all our manufacturing sites.

7.3 By 2030, double the global rate of improvement in energy efficiency

Energy and climate change, **Environmental indicators**

Promote inclusive and sustainable economic growth, employment and decent work for all

- We apply a zero tolerance approach to forced labor.
- We assess and mitigate social risks in our extended supply chain.
- We focus on providing a safe workplace with zero injuries and zero occupational diseases.

8.7 Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labor, including recruitment and use of child soldiers, and by 2025 end child labor in all its forms

Labor and human rights, **Responsible supply chain**, **People indicators**

8.8 Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment

Health and safety, **Labor and human rights**, **Responsible supply chain**, **People indicators**

Build resilient infrastructure, promote sustainable industrialization and foster innovation

- We promote open innovation and partner with a wide range of universities and research institutes throughout the world.

9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending

Innovation, **Business indicators**

Reduce inequality within and among countries

- We promote equal opportunities for all.
- Our ambition is to be a leader in cultural and disability inclusion.
- Our ST Foundation is bridging the digital divide.

10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

Diversity, equity and inclusion, **Community and education**, **People indicators**

Ensure sustainable consumption and production patterns

- We strive for zero waste in landfill, reduce our consumption of chemicals and eliminate hazardous materials.

12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their lifecycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

Chemicals, **Environmental indicators**

Take urgent action to combat climate change and its impacts

- We are committed to being carbon neutral by 2027.
- We deploy programs to reduce our GHG emissions.
- We actively participate in industry initiatives for action on climate change.

13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Energy and climate change, **Environmental indicators**

Revitalize the global partnership for sustainable development – Multi-stakeholder partnerships

- As a member of the Responsible Business Alliance and other industry associations, we share knowledge and expertise to help achieve the SDGs.

17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries

Labor and human rights

Augmenting everybody's life

9,000+
people working in R&D

77%
of new products identified as responsible

2011
launch of product stewardship program

Futurestarters, ST Shenzhen, China

Sustainable financial performance

AUGMENTING EVERYBODY'S LIFE

We create profitable growth, managing risks and increasing long-term value for all stakeholders.

26.4%
net revenue increase

27.5%
operating margin

US$3.96
billion net income

Our net revenues increased 26.4% to US$16.13 billion in 2022, driven by strong demand in Automotive and Industrial, and our engaged customer programs. All three of our product groups contributed to this growth.

Profitability improved year-on-year: gross margin was 47.3%, up from 41.7%; operating margin was 27.5%, up from 19.0%; and net income was US$3.96 billion, almost doubling from US$2.0 billion.

We generated strong net cash from operating activities. We invested US$3.52 billion in capital expenditure (CAPEX) and delivered free cash flow of US$1.59 billion. Our net financial position increased to US$1.8 billion on December 31, 2022, from US$977 million one year ago.

In 2022, we saw unprecedented demand across all geographies in Automotive, driven by increasing semiconductor demand, structural transformation, and inventory replenishment. We continued to execute our strategy for vehicle electrification in our silicon carbide business. In vehicle digitalization, we had a range of design wins with our microcontrollers and power solutions for new zonal car architectures. In automotive sensors, we continued to increase the scale of our business in inertial sensors, growing by over 40% year-on-year.

US$16.13 billion
revenues

In Industrial, demand was very strong throughout the year, especially in power and energy, factory automation and robotics, and in industrial Infrastructure. In power and energy management applications, such as EV charging stations, photovoltaic systems and industrial power supplies, we had many important design wins with our power discrete portfolio of both silicon and wide-bandgap-based devices, and we further extended our product offer during the year. We grew our business for sensors for industrial applications, with revenue growth of around 50% year on year, with customer design wins in many areas, such as equipment condition monitoring, asset tracking, and healthcare.

In Personal Electronics, we had many design wins in flagship smartphones with our motion and environmental sensors, Time-of-Flight ranging sensors, wireless charging products, touch display controllers, and secure solutions. We also leveraged our broad portfolio to address high-volume personal electronics applications, such as smart watches, headsets and other wearables, as well as gaming accessories from leading players in each area.

In Communications Equipment, we progressed well with engaged customer programs for selected applications in cellular and satellite communication infrastructure and received new awards based on our proprietary technologies. I 2-6 I 3-3 I

Automotive

+51%
Growth

33%
of Total Revenue

Industrial

+34%
Growth

29%
of Total Revenue

Personal Electronics

+2%
Growth

27%
of Total Revenue

CECP*

+19%
Growth

11%
of Total Revenue

* Communications Equipment, Computers and Peripherals

Full details of our financial results are available in our annual reports (Form 20-F and IFRS), which can be found on our website (see **investors.st.com**).

Lorenzo Grandi
President, Finance, Purchasing, ERM & Resilience, Chief Financial Officer

In 2022, ST increased revenue and profitability quarter-on-quarter and posted a record year with revenue and net income growth of 26.4% and 66.4%, respectively, compared to the previous year. These results confirm the strength of our market strategy and our product portfolio, the resilience of our Integrated Device Manufacturer model and the commitment of our team as we navigated the challenges our industry faced during the year. Our focus on operational excellence and on our value proposition for all stakeholders – sustainable and profitable growth, providing differentiating enablers to customers, and a strong commitment to sustainability – positions us well on the path to achieve further improvements in both revenue and profitability."

Manufacturing

We continued transforming our manufacturing base throughout 2022 to enable our future growth and drive enhanced profitability, with a significant expansion of our 300mm capacity and a strong focus on wide-bandgap semiconductors.

In silicon carbide, we plan to increase front-end capacity tenfold compared to 2017 and have 40% of our substrate needs internally sourced by 2024. We are building an integrated silicon carbide substrate manufacturing facility in Catania (Italy) as an important step in our silicon carbide vertical integration strategy. Volume production is expected to start in the second half of 2023.

Investments driving

future growth

In addition, we further expanded our 300mm capacity in Crolles (France). We also signed a memorandum of understanding with GlobalFoundries to create a new 300mm semiconductor manufacturing facility adjacent to our existing facility in Crolles.

At our Agrate site (Italy), the first industrialization line and qualification of engineering samples was completed in 2022, and we are now ramping our new 300mm wafer fab.

All these initiatives will be aligned with our sustainability strategy and our sustainable manufacturing commitment in terms of energy consumption and greenhouse gas emissions, air, and water quality.

EU Taxonomy

On July 12, 2020, EU Regulation 2020/852 of the European Parliament and of the Council of June 18, 2020 (EU Taxonomy Regulation) entered into force. The EU Taxonomy Regulation establishes the basis for a classification system to determine which economic activities can be considered environmentally sustainable. It is part of the EU's efforts to achieve the objectives of the European 'green deal', Europe's strategy towards climate neutrality in 2050. The EU taxonomy regulation is designed as a transparency tool to help companies and investors make sustainable investment decisions, with the overall purpose to steer financing towards more sustainable economic activities. Under the EU taxonomy regulation, we are required to disclose information on how and to what extent our activities qualify as environmentally sustainable.

The EU Taxonomy Regulation includes additional reporting obligations for the financial year 2022. As a non-financial undertaking, we have to disclose information on our eligible economic activities (taxonomy-eligible) and our aligned activities (taxonomy-aligned). For financial year 2022 in relation to climate change mitigation and climate change adaptation, we have included disclosure of: (i) taxonomy-eligible and taxonomy-aligned, (ii) taxonomy-eligible and taxonomy-not aligned, and (iii) taxonomy non-eligible economic activities within our turnover, capital expenditure and operating expenditure, see **EU Taxonomy**.

Extra-financial performance

Each year, socially responsible investment rating agencies, analysts and investors evaluate our corporate behavior and performance based on a wide range of environmental, social and governance (ESG) topics.

In 2022, we maintained a strong presence in the major sustainability indices, including Dow Jones Sustainability Index World and Europe, FTSE4Good, MSCI (score AAA), Solactive Global and Europe CSR index, EuroNext VIGEO Europe 120, Eurozone 120 and Benelux 120, CAC 40 ESG, MIB ESG, ISS ESG Corporate Rating and Vérité40.

Furthermore, we have been included in the Bloomberg Gender Equality Index since 2018.

We received an A score for CDP water security, which is in the leadership band. This is higher than the Europe regional average of B, and higher than the electrical and electronic equipment sector average of B-. We received a B for CDP climate change, which is in the management band. This is the same as the Europe regional average of B, and higher than the electrical and electronic equipment sector average of C.

These achievements acknowledge our longstanding commitment to conducting our business responsibly, and recognize our performance in many areas, ranging from business ethics, innovation, and quality to environment and labor practices. Participating in these evaluations provides an opportunity to assess our performance within a wider context, benchmark ourselves against our peers, measure our progress, and identify areas for further improvement.

Innovation

AUGMENTING EVERYBODY'S LIFE

We believe innovation is the fuel that drives our sustainability and growth.

US$1.9
billion invested in R&D

597
patents filed in 2022

186
active R&D partnerships

SiC technology

Innovation is a driving force that fuels our growth and helps us achieve our business objectives: creating technology-driven products that solve real-world problems and contribute to a more sustainable future.

We believe technology plays a key role in helping to solve environmental and social challenges. In 2022, we invested US$1.9 billion in research and development (R&D) to support innovation, representing 12% of our net revenues.

How we innovate

Building an internal framework

We view innovation as a collective task. We have therefore developed an ecosystem to initiate, develop and sustain innovation throughout the Company and beyond.

Our Innovation Office provides a framework for accelerating innovation processes and searching for disruptive technologies and applications. Its mission is to create both internal and external innovation opportunities by connecting emerging market and technology trends with our internal technology expertise.

Innovation Office

Under the guidance of our Innovation Office, our Technology Council's mission is to review the most advanced R&D activities and develop a three-to-five-year roadmap. The council is supported by world-leading academic and industrial experts in technologies relevant to our business. I 3-3 I

Alessandro Cremonesi
Executive Vice President, Chief Innovation Officer, General Manager, System Research and Applications

Innovation is in our DNA. To sustain our future growth in a rapidly evolving environment, we are strongly accelerating our innovation rate by leveraging our internal and external capabilities. By continually developing, importing and delivering innovation, ST is at the center of a global innovation ecosystem that we nurture to accelerate global sustainable growth. Our Innovation Office drives this approach. It involves the whole of ST and our network of partners in a holistic process – what we call our 'deeply nested innovation model'."

We also established cross-functional teams to contribute to breakthrough innovation in priority areas and support our business and sustainability objectives. These teams facilitate knowledge sharing between both internal and external innovators, including networking activities with startups, academia, and R&D leaders.

Internal technology expertise

Over 9,000 employees work in R&D and design. This includes more than 800 technical staff members who are recognized for their advanced expertise.

This community drives our most advanced innovations, enabling us to develop new technologies and helping to foster R&D partnerships with prestigious universities and partners worldwide. Our expertise is recognized externally through our involvement and contribution at key scientific conferences. In 2022, ST participated in 250 scientific and technical conferences, with over 700 lectures by our staff.

Top
100
Global Innovator

Our sites around the world are helping to nurture the entrepreneurial spirit of our employees through our fab labs and hubs that help to connect our technical employees within local innovation ecosystems.

In 2022, we were named a Top 100 Global Innovator™ by Clarivate™, recognizing our position among the world's most innovative organizations.

Leading-edge technologies

The focus of our innovation and the evolution of our technology is centered on three long-term trends reshaping industry and society and supporting the transition to a more sustainable world. These trends are:

- Smart mobility
- Power and energy management
- Internet of Things (IoT) and connectivity

Thanks to our wide portfolio of patents and strong pipeline of innovation, we are one of the few semiconductor companies mastering a very broad range of chip manufacturing technologies. In 2022, we filed 597 patents, an increase of 10% on the previous year. See more details about our technologies on **www.st.com** .

597
patents filed

In 2022, we announced the expansion of our operations in Catania (Italy) with an integrated silicon carbide (SiC) substrate manufacturing facility to be built alongside the existing SiC device manufacturing facility. SiC is a compound semiconductor material with intrinsic properties providing superior performance and efficiency over silicon. The facility will be the first of its kind in Europe for the volume production of 150mm and 200mm SiC epitaxial substrates, integrating all steps in the

production flow. This development will support the needs of automotive and industrial customers in their shift to electrification and higher efficiency.

Artificial intelligence

ST is a leading provider of diversified software and hardware artificial intelligence (AI) solutions for tiny devices, such as sensors and microcontrollers.

Our AI solutions range from sensing, through embedded computing to actuation, supporting customers in shaping smarter products in sectors such as personal electronics, industrial, and automotive.

In 2022, we continued to develop our AI ecosystem by releasing multiple, incremental versions of STM32Cube.AI and NanoEdge AI Studio. STM32Cube.AI now supports Deeply Quantized Neural Networks (DQNN), a highly innovative feature that reduces the inference time and memory requirements of neural networks.

We also opened a new AI competence center specialized in the development and support of the NanoEdge AI Studio tool in Toulon (France). It adds to our other AI competence centers around the world. This is part of our ongoing efforts to simplify access to embedded AI technologies and their integration into industrial and consumer equipment.

Furthermore, to strengthen our early investment in the MLCommons Tiny working group that began in 2020, we became an official member of MLCommons. This open engineering consortium is dedicated to accelerating innovation in machine learning. It focuses on industry benchmarks, datasets, and best practices to accelerate the market adoption of tiny devices.

FOCUS

LAUNCHING OUR INTELLIGENT SENSOR PROCESSING UNIT

In 2022, we launched our Intelligent Sensor Processing Unit (ISPU), which combines a Digital Signal Processor (DSP) for AI algorithms and a MEMS sensor interface on the same silicon.

These smart sensors are able to sense, process and take action, offering seamless transactions with no discernible distinction between online and offline. ISPU also enables local decision-making, while substantially saving space and reducing power by up to 80%. This technology reflects the ‘Onlife Era’, where technology and everyday life come together.

AI training, machine learning, and the resulting neural network can run within the sensor itself. This enables ‘in-the-edge AI’ where, for example, smart inertial devices can perform advanced motion-detection functions within the sensor. This occurs without interaction with the external microcontroller and allows substantial power saving at the system level.

Innovation ecosystem

Recognizing the importance of partnerships in the innovation process, we build strategic alliances, engage in bilateral research cooperation, and participate in standardization bodies. Overall, we were involved in 186 active R&D partnerships in 2022.

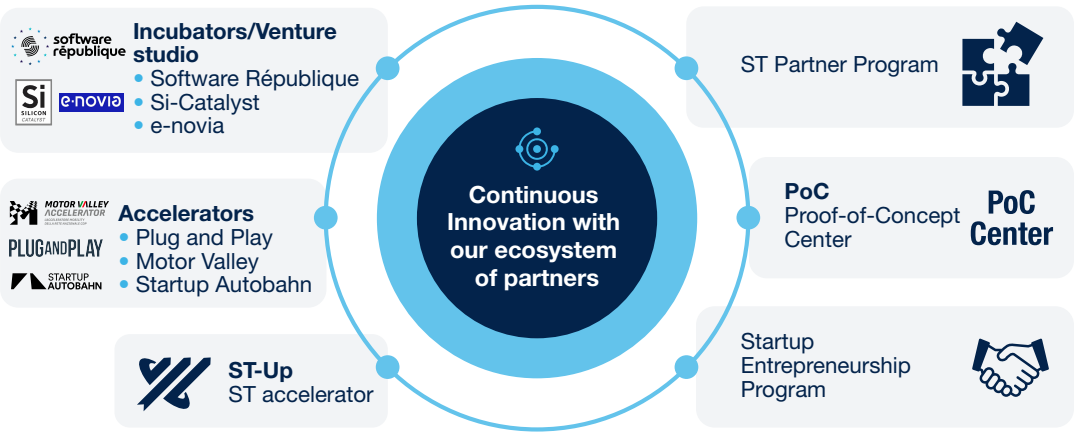
External partnerships

We continued to develop our program of external partnerships. These bring together industry leaders from along the value chain to accelerate innovation, mainly in the automotive and industrial sectors, and diversify our scouting process in the smart mobility sector.

In 2022, the Important Project of Common European Interest (IPCEI) on Microelectronics successfully completed its technical activities in France. This was part of a French 5-year public-private strategic support program, called Nano 2022.

Thanks to Nano 2022, ST achieved major results in cutting-edge technologies for efficient computing, local data storage security, advanced connectivity, efficient power supply, novel and versatile optical sensors, efficient and faster data transmission, and connection. These technologies enable emerging applications in the automotive, IoT, industrial, security, space and aeronautics downstream markets.

The IPCEI program is still running in Italy, with additional objectives for technologies and products to be achieved by the end of 2024 on energy efficient chips, power semiconductors, and smart sensors.



We continually nurture our open innovation ecosystem through a range of programs.

- **ST Partner Program** raises the profile of authorized high-quality partners, showcasing their products and services through our website. We have more than 300 partners, including startups.
- **Proof-of-Concept (PoC) Centers** provide coworking spaces for small and medium-sized enterprises to speed up their proof-of-concept phase.
- **Startup Entrepreneurship Program** provides tailored incubation services, including hosting, technical support, and mentoring, to help commercialize designs by the hosted startups.
- **ST-Up accelerator program** supports hardware and technology startups through an 18-month, five-step process.
- **Accelerators** – we collaborate with accelerator initiatives such as Motor Valley and Startup Autobahn within the Plug and Play ecosystem.
- **Incubators** – we work with a global network of expert partners, such as Software République, Silicon Catalyst and e-novia.

To develop our partnerships, we continually engage in scouting activities. ST business leaders, R&D managers, as well as young talent are involved in the technical and marketing selection process. In addition to our own initiatives, we benefit from the scouting capabilities of a worldwide network of external partners, supported by our regional competence centers and fab labs.

In 2022, we partnered with over 70 startups, an increase of 50% on 2021. We also improved our process for managing the startup lifecycle to further enhance our capability to drive successful partnerships.

A notable event in 2022 was the 'Future of Mobility' event we jointly hosted with the US-based Plug and Play Tech Center. The event took place in Catania (Italy) and brought together more than 150 leaders from the global mobility industry to discuss topics such as electrification, sustainability,

radars, and digital twins. The aim was to increase and broaden innovation to shape future mobility solutions through a holistic, partnership approach involving both large players and startups.

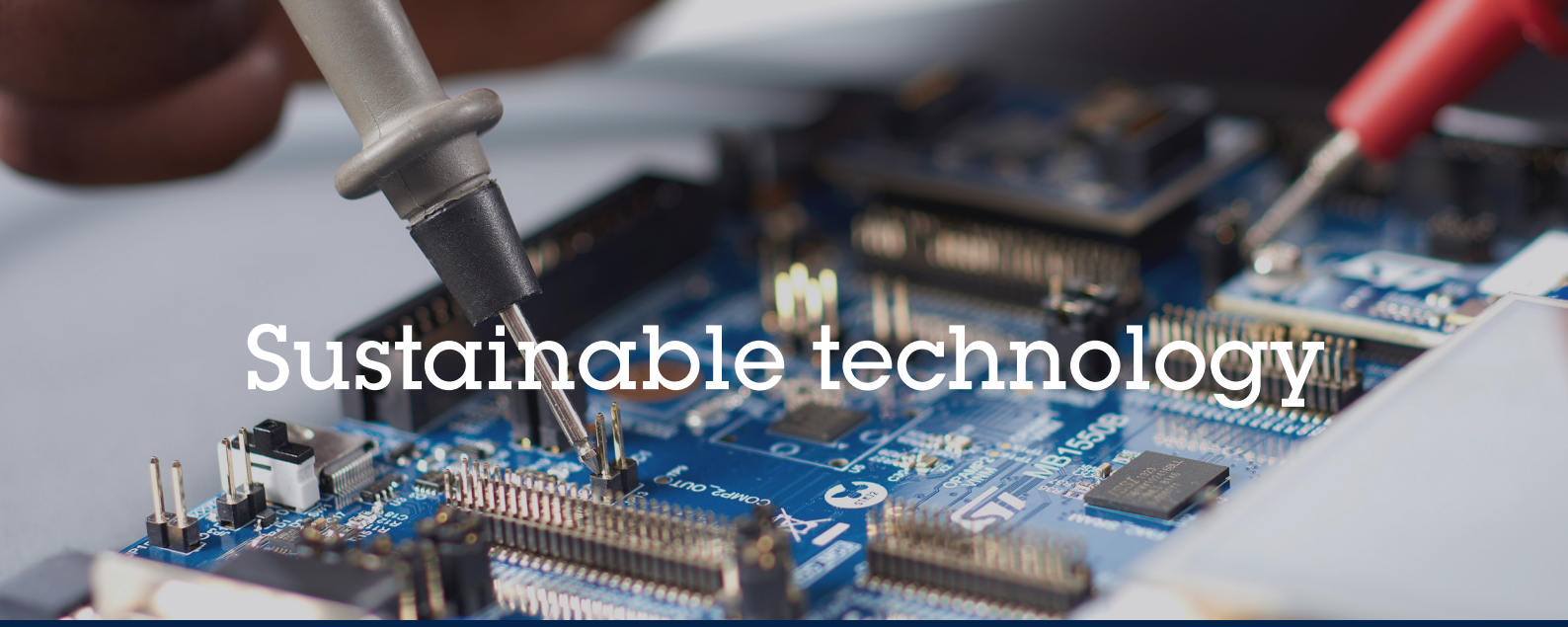
Thanks to these programs, we are constantly exploring new sustainable solutions and enabling responsible applications for safer, greener, and smarter living (see **Sustainable technology**) via a model that supports both a push (inside-out) and pull (outside-in) approach to innovation.

Contributing to the Sustainable Development Goals

Our commitments and programs as described above contribute to:

SDG target 9.5 – Enhance scientific research, upgrade the technological capabilities of industrial sectors, and increase private research and development spending.

2025 sustainability goal	Status	Comments
SG1: Generate at least 20% of our revenues from new product lines by 2025.		13%



Sustainable technology

AUGMENTING EVERYBODY'S LIFE

Our technology plays a key role in helping to solve environmental and societal challenges.

2011
launch of product stewardship program

23%
of revenue from responsible products

77%
of new products identified as responsible

Microcontroller printed circuit board

A unique lifecycle approach

Since launching our product stewardship program in 2011, we have applied a product lifecycle approach at every stage, from responsible sourcing to end of life. This not only reflects our commitment to creating sustainable technology in a sustainable way, but also makes a positive contribution to the world.

SUSTAINABLE TECHNOLOGY by ST

To better manage our risks and address business opportunities in fast growing sustainability markets, we further developed our product stewardship program in 2022. As a result, we reworked our lifecycle assessment (LCA) tool for higher automation and scalability, with the aim of better supporting our customers and providing more accurate data for investors. We then worked alongside an external consultant to define a roadmap for scaling up the adoption of the updated LCA tool and further integrating it across all ST systems.

The LCA methodology is developed in line with ISO standards 14040 and 14044. Our product management system tracks key indicators to encourage our product development teams to implement green designs wherever possible. I 3-3 I

Today, we can undertake an LCA for any product in our portfolio based on specific product parameters. As well as climate change, the estimated footprint can be calculated for other categories, such as water demand, eutrophication or photochemical ozone formation.

Olivier Zanellato
Product stewardship and LCA, Corporate Sustainability

Since taking on responsibility for product stewardship in 2022, I have witnessed an increasing demand for LCA, both from customers and regulators. The challenge for ST is to have a solution able to cover its diverse portfolio of over 20,000 products. Our new upgraded LCA tool can dynamically provide the footprint of any product on demand. In 2023, we will continue working on more accuracy, automation, integration, and coverage (biodiversity and social). Our ambition is to get our LCA approach certified in the coming years."

Program progress

Paving the way to sustainable applications

Our sustainable technology program enables us to classify our products into four categories of 'responsible products' that provide environmental and social benefits.

Responsible products			
Eco-design products		Sustainable applications	
Low carbon Reduce production footprint	**Power-efficient** Consume less electricity	**Planet-friendly** Enable green solutions	**Human-welfare** Improve end-user quality of life
Environmental benefits			Social benefits

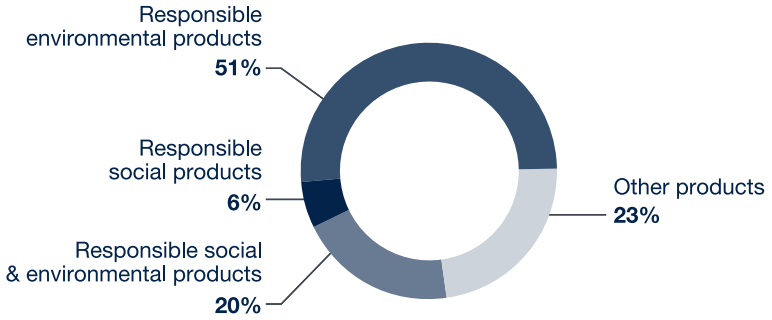
A product is given a 'responsible product' label when it demonstrates that the use for which it was designed brings social or environmental benefits. Examples of responsible products are available on www.st.com .

Enabling the transition to planet-friendly alternatives, our semiconductor solutions are used in a wide variety of environmental applications, from electric mobility and renewable energy grids to smart industries. In addition, our products and technologies cater to a wide variety of human-welfare applications with social benefits. These solutions help our customers create applications that ensure people lead safer and healthier lives.

77%
of new ST products are responsible products

We identified 77% of our new products as responsible in 2022, compared to 69% in 2021. This classification helps us identify and track revenues from our responsible product portfolio. In 2022, revenues from responsible products increased to 23%, compared to 20% in 2021. This is on track for our 2027 target to generate at least 33% of our revenues from responsible products.

ST new products in 2022 | 417-1 |



Jean-Louis Champseix
Group Vice President, Corporate Sustainability

For more than 10 years, our strategy has been to create responsible technologies for a more sustainable society. All our products go through an eco-design and then a full lifecycle assessment, from 'cradle to grave'. Several environmental criteria are assessed such as greenhouse gas emissions and water impact. This comprehensive approach enables us to predict and reduce our manufacturing footprint. It also provides our customers with a competitive advantage through the improved handprint and positive environmental impact of our technologies and products during their use phase."

Considering every stage of the product lifecycle

Enabling-technologies ▶ Eco-design ▶ Responsible sourcing ▶ Low footprint manufacturing ▶ Power-efficient products ▶ Sustainable applications ▶ End of life recycling

Enabling technologies and eco-design

ST creates advanced semiconductor technologies by offering innovative power electronic solutions based on wide-bandgap technologies, such as silicon carbide (SiC) and gallium nitride (GaN).

By keeping eco-design at the heart of our product development, our designers innovate to create:

- **Low-carbon products**: thanks to low resource consumption and the lower number of manufacturing steps required, these products reduce the environmental footprint of our production equipment, utilities, and supply chain.
- **Power-efficient products**: state-of-the-art in reducing electricity consumption and power losses, these products lower the environmental footprint of the end-devices they are embedded in.

Responsible sourcing

Our responsibility begins with the raw materials and the substances we use to manufacture our products. All our raw materials are sourced in line with the latest environmental and social guidelines, and sustainability criteria are included in our purchasing processes (see **Responsible supply chain** and **Responsible mineral sourcing**).

Low footprint manufacturing

We strive to reduce the impact of our manufacturing activities on natural resources by managing our greenhouse gas (GHG) emissions, reducing our energy, water and chemical consumption, and recycling waste.

Power efficient products and sustainable applications

Reducing the power consumption of electronic devices is a major feature of our portfolio, helping to reduce our environmental footprint year after year. However, our products go beyond power efficiency and contribute in other ways to help solve environmental and social challenges.

End of life recycling

We strive to ensure our products meet or exceed applicable environmental requirements such as REACH[1], RoHS[2] and HSPM [3] (see **Chemicals**). ECOPACK processes and classification help us monitor the substances used in our products, which in turn facilitates end of life and recycling when our devices are disposed of. By the end of 2022, 96% of our products exceeded RoHS directives and were rated ECOPACK2 or ECOPACK3.

96%

of our products exceed RoHS directives

ST technologies that are driving tomorrow

NFC for sustainability

Near Field Communication (NFC) is a technology based on Radio Frequency Identification (RFID) that enables wireless communication between a reader and a tag. It can be used to connect products to the digital world, while also enabling innovative sustainability features. In 2022, ST published a **white paper** outlining how brands, consumers and companies can benefit from NFC technology in our progress towards a greener planet.

An example from our NFC portfolio is the ST25 product family whose features make it suitable for sustainable applications, providing a wide range of benefits such as:

- consumer product sustainability information
- product eco-design
- product sustainability over lifecycle
- second-life advice
- health and safety
- circularity
- responsible supply chain management
- consumer reward programs

Since its release in October 2022, the white paper had more than 25,000 visits and 1,565 downloads.

Connected health

ST is a trusted provider of high-quality technical solutions that enable the development of breakthrough medical systems. Our technologies have increasingly become an enabler for medical and healthcare applications, paving the way to connected health or e-health. They offer multiple benefits such as remote monitoring, privacy and integrity of patient data, compact devices for diagnostic measurement, increased processing power, and AI.

Smarter mobility

With cars becoming more connected and therefore more vulnerable to cyberattacks, security has become a critical concern for automotive applications. ST is committed to providing secure solutions to address the challenges of this new era of digital technologies.

Our well-proven ST33-A hardware secure element, STSAFE-V and ST4SIM families were designed to guarantee passenger safety, avoid abnormal vehicle behavior, ensure data privacy in vehicle-to-network communications and incorporate digital key systems.

Smart farming

The farming industry is becoming increasingly digitalized through the widespread adoption of the latest data and communication technologies. Real-time collection and analysis of field information,

[1] REACH: Registration, Evaluation, Authorization and Restriction of Chemicals.
[2] RoHS: Restriction of Hazardous Substances.
[3] HSPM: Hazardous Substance Process Management.

such as soil moisture, temperature, pH, and other quality parameters, is important to maximize the quality and yield of the harvest.

Our STM32 family of products, in combination with a market-proven selection of environmental and inertial sensors, offer comprehensive solutions to enable product tracking, irrigation systems, livestock position, crop health monitoring and smart tractors.

ST's product portfolio for irrigation systems caters to a variety of products and applications in two main categories:

- pumps, actuators, and valves, which are used to properly convey a controlled flow of water and ensure an efficient water supply
- sensing and control applications that provide real-time data for monitoring, effective irrigation control and water management, using the latest wireless technologies for reliable connectivity

The potential of ST products and solutions to play an important role in enabling the green transition has been increasingly recognized at numerous high-profile events, such as:

- Reuters Impact (United Kingdom), where ST President and CEO Jean-Marc Chery discussed how new technologies are accelerating society's transition to cleaner and smarter systems.
- CESA (France), which focuses on automotive electronics and sustainability, where ST was well represented by top executives.
- Electronica 2022 (Germany), where ST showcased technology for smarter mobility along with energy efficiency, industrial IoT and factory automation.

FOCUS

ST-ONE AND ONLY

The innovative ST-ONE power supply controller joins forces with our MasterGaN technology in a ground-breaking laptop/smartphone charger design with energy recovery. It is the world's first digital controller to integrate a programmable offline power supply controller. It is a turnkey solution for designing standard applications.

ST-ONE controls the MasterGaN chip, to make the best of its high-power density for even greater energy efficiency. The technology means that end products can be smaller and consume less energy. As a result, adapters built with ST-ONE can reduce both CO_2 emissions and the quantity of plastics used, providing significant sustainability and environmental benefits.

In addition, ST-ONE's energy recovery technologies optimize power supply control to recover energy normally dissipated as heat from conventional circuits. The device also simplifies circuit design with a significant reduction in the number of components. This enables more robust and affordable power supplies and encourages greater adoption throughout the market.

While using GaN substantially reduces carbon emissions, Domenico Arrigo, Industrial and Power Conversion Division General Manager, STMicroelectronics, said of its impact on packaging, "if one billion chargers worldwide were to use our technology, the world could save 200,000 tons of plastics and raw materials."

2027 sustainability goal	Status	Comments
SG2: Generate at least 33% of our revenues from our Sustainable Technology's most advanced responsible products by 2027.		23%

Customer satisfaction

AUGMENTING EVERYBODY'S LIFE

We have adopted a proactive approach to addressing our customers' expectations, helping us build strong relationships.

>83%
customers satisfied with online support

IATF
16949 certified since 2018

RBA
audit results shared with customers

Industrial summit, Shenzhen, China

Building strong and trusting relationships with our customers, considering their needs, and serving them effectively, is essential for our business. This includes the range, performance, quality, and reliability of our products, as well as our approach to the environment, health and safety, and social responsibility.

Among the most important factors influencing customer satisfaction at ST are sustainability, product quality, and continuous dialog. I 3-3 I

Unlocking value with sustainability

Sustainability is an integral part of who we are. For nearly 30 years, we have prioritized sustainable practices, promoting transparency and accountability across our operations. With this vision, we create technologies that enable our customers to boost sustainability and seize opportunities. We believe this proactive approach creates value not only for our customers, but also for society at large.

We have adopted a proactive approach to addressing our customers' sustainability expectations. We have been a member of the Responsible Business Alliance (RBA) since 2005. All our manufacturing locations and major sites complete an annual self-assessment questionnaire on labor and human rights, safety, ethics, and environmental topics. In addition, our largest manufacturing sites are subject to RBA third-party audits (see **Labor and human rights**). We share the results of these questionnaires, audits, and corrective actions with our customers through the RBA platform or via our online support.

Audit results shared
with customers

Sustainability is a collective responsibility. We prioritize traceability and openly communicate the environmental and social impacts of our products to our customers. This includes information on product compliance, material declaration, working conditions, environmental impact, and the sourcing of materials. Where relevant, we publish this information on our website at **www.st.com** or provide it through online support.

Jérome Roux
President, Sales and Marketing

At ST, we strive to create long-term value for our customers and ensure the highest level of customer satisfaction. We believe in building trust with our customers through strong partnerships, high performance products and technologies, supported by our comprehensive commitment to sustainability."

Customer satisfaction through quality

We are committed to delivering the highest-quality products and services that meet or exceed customer expectations. We are constantly looking for ways to improve and innovate in quality. This focus on quality helps us build strong, trusting relationships with our customers. By delivering the highest quality products and services, we aim to ensure our customers are satisfied with their experience with ST. Our quality policy is available at **www.st.com** .

Our approach to quality

Our quality strategy sets out how we can be our customers' most valued and trusted partner by focusing on excellent quality, reliability, and responsiveness. Our company-wide quality program, structure, and working model focus on meeting the needs of our global customers, bringing all our organizations and sites together to work as one unified team.

Our strategy is supported by our quality excellence culture, which we see as a competitive advantage and a differentiating factor for our Company and the products and solutions we provide. It is driven by our principles of strength, teamwork, resilience, innovation, value, and expertise.

This global approach has contributed to the improvement in our quality KPIs and customer perception. Our people, programs, and processes have helped us improve our quality performance and increase overall customer satisfaction and trust.

Moving forward, we will continue to focus on quality prevention measures through R&D and new product development, investing in leadership and expertise, and digitally transforming our quality processes to improve prediction, prevention, and detection. By continually improving our quality processes and investing in our people, we believe we can better serve our customers and drive customer satisfaction.

Management systems

Our quality management system is the foundation of our quality approach. We have been certified to internationally recognized quality standards, such as ISO TS 16949, IATF 16949:2016, and ISO 9001:2015, which demonstrate our strong commitment to quality governance and compliance. Our company-wide certification has been renewed every 3 years since 2003, and ST has been certified IATF 16949:2016 and ISO 9001:2015 since 2018.

ISO 9001
certified

Quality performance

We achieved significant further improvement in our overall quality performance in 2022, including improved customer scorecards and quality KPIs. This demonstrates the effectiveness of our efforts and commitment towards continuous improvement.

Quality

	2018	2019	2020	2021	2022
Customer incidents	79	84	66	57	**50**
Cycle time to process customer incidents	88	98	102	93	**84**

Baseline 100 in 2016.

A continuous customer dialog

We maintain a continuous, wide-ranging dialog with customers at all levels, to understand, assess, and address their needs and concerns.

FOCUS

QUALITY WEEK: OUR ANNUAL EVENT TO STRENGTHEN CUSTOMER SATISFACTION

We hosted our sixth annual quality week in 2022. The event focused not only on building and strengthening customer satisfaction, but also celebrating it. ST employees from across the globe had the opportunity to attend both live and virtual events. These included interviews with key customers and interactions with quality leaders and ST executives from various groups and regions.

These activities gave us the opportunity to better understand how customers perceive ST and what they expect going forward. We gained further insights into the impact of quality in our value chain. Leaders were also able to share further information on Envision Quality 2025, our vision for the next stage of our quality journey.

During the week, sites also organized activities and exchanges on best practices to complement corporate events.

The week was hugely successful in engaging employees across the organization in the constant pursuit of excellence.

Multiple channels for seamless customer support

We offer our customers various channels to obtain information about our products or find answers to any questions they may have about our business.

- Our website (**www.st.com**) provides a wealth of information and insights into ST customer solutions, including product brochures and flyers, product datasheets, application solutions, and short videos on key products and how they can help in application designs. Customers can also purchase samples and tools online.
- Online communities for specific product families or applications enable people to share knowledge and post questions to other members of the community.
- Phone and online support enable customer queries. We regularly review customer feedback and use it to improve our customer support processes. In 2022, more than 83% of our users were satisfied with our online support service.
- In-person and online seminars and training courses on our products, either directly hosted by ST or in partnership with third parties develop our customers' skills.
- Regular newsletters keep customers and partners up to date on new products and events, including seminars, conferences, webinars, and online courses.
- Social media channels, YouTube videos, and blog postings reinforce communication and awareness.

83%

of customers satisfied with online support service

Maintaining close relationships at all levels

Our dedicated cross-functional teams are responsible for managing day-to-day relationships with larger customers. These teams include representatives from Sales, Logistics, Technical Support, and Quality. Through their daily dialog with customers, the teams develop a deeper understanding of the customer, their internal processes, and their preferences. The relationships they build foster a high level of trust and satisfaction. We also work to build close relationships between ST executives and key customer executives, further strengthening trust and satisfaction at the highest levels.

Relationships with smaller customers are managed by the ST distribution partner network. This comprises ST personnel and distribution partners from across the globe. Network personnel regularly visit customers to assess opportunities, present our product portfolio, and support them in their product design and development.

Collecting customer feedback on our performance

We collect feedback on our performance during our interactions with customers. Feedback may be communicated informally during meetings or phone calls, or it may be provided formally via a scorecard. Each customer scorecard is closely reviewed so the various components of the performance evaluation (such as technology, delivery, sustainability, and quality) can be analyzed and communicated to the appropriate functions within ST.

We make these scorecards and customer feedback available via our 'Vivavoce' internal portal. A summary of the customer scorecard is posted on our internal website, visible to all organizations within ST. This visibility provides each organization with customer feedback on its performance and is a driver for continuous improvement.

2027 sustainability goal	Status	Comments
SG21: Further reduce defects by 20% per production unit by 2027 (vs 2020).		-17%

Business indicators

This section includes indicators and GRI standard disclosures.

ST key figures | 201-1 |

	2018	2019	2020	2021	2022
Net revenues (US$m)	9,664	9,556	10,219	12,761	**16,128**
Gross profit (US$m)	3,861	3,696	3,789	5,326	**7,635**
Gross profit as a percentage of sales (%)	40.0%	38.7%	37.1%	41.7%	**47.3%**
Net earnings (US$m)	1,287	1,032	1,106	2,000	**3,960**
Diluted earnings per share (US$)	1.41	1.14	1.20	2.16	**4.19**
Market share versus TAM (%) (Total Available Market)	2.06%	2.32%	2.32%	2.30%	**2.81%**

Operating income and cash flow (US$m) | 201-1 |

	2018	2019	2020	2021	2022
Operating income	1,400	1,203	1,323	2,419	**4,439**
Net operating cash flow	533	497	627	1,120	**1,591**

Net revenues by location of order shipment[1,2] (%) | 2-6 | 201-1 |

	2018	2019	2020	2021	2022
Americas	13	14	11	12	**14**
Asia Pacific	61	62	69	68	**63**
EMEA	26	24	19	20	**22**

(1) Net revenues by location of order shipment are classified by location of customer invoiced or reclassified by shipment destination in line with customer demand. For example, products ordered by US-based companies to be invoiced to Asia Pacific affiliates are classified as Asia Pacific revenues. Furthermore, the comparison among the different periods may be affected by shifts in shipment from one location to another, as requested by our customers.

(2) The sums may not add up to 100% due to rounding of the figures.

ST sales by market channel[1] (%) | 2-6 |

	2018	2019	2020	2021	2022
OEM	65	70	73	66	**67**
Distribution	35	30	27	34	**33**

(1) Original Equipment Manufacturers (OEM) are the end-customers to which we provide direct marketing application engineering support, while Distribution customers refers to the distributors and representatives that we engage to sell our products around the world.

Dividends paid (US$m) | 201-1 |

	2018	2019	2020	2021	2022
Dividends	216	214	168	205	**212**

ST new patents filed SDG 9.5

	2018	2019	2020	2021	2022
Total	549	588	557	543	**597**

Research partnerships SDG 9.5

	2018	2019	2020	2021	2022
Contracts with higher education institutions or research labs	160	138	143	187	**186**

On-time delivery

	2018	2019	2020	2021	2022
Delivery date in line with customer request	88	105	79	67	**66**
Delivery date in line with ST commitment	92	103	90	80	**78**

Baseline 100 in 2016.

ECOPACK® labelling[1] (%) | 417-1 |

	2018	2019	2020	2021	2022
Non ECOPACK®	0.2	0.2	0.1	0.2	**0.1**
ECOPACK® 1: Compliant with the RoHS/ELV directives, second level interconnect lead-free[2]	6.8	6.3	4.2	3.9	**3.8**
ECOPACK® 2: as ECOPACK® 1, plus free of brominated, chlorinated and antimony oxide flame retardants	85.1	85.2	88.4	87.4	**88.5**
ECOPACK® 3: as ECOPACK® 2, plus free of halogens with no RoHS exemptions	8.0	8.3	7.3	8.5	**7.5**

(1) The sums may not add up to 100% due to rounding of the figures.

(2) Including exemptions for the RoHS directive to ensure reliability for soldering at higher temperature, necessary mainly for the automotive market.

ST site certifications
ST is ISO 9001 certified company-wide

	ISO 45001 Health & Safety	ISO 14001 Environ-ment	EMAS Environment performance disclosure	ISO 14064 GHG Emissions	ISO 50001 Energy	ISO 22301 Business Continuity	IATF 16949
Manufacturing sites							
Agrate	✓	✓	✓	✓	✓	✓	✓
Ang Mo Kio	✓	✓	✓	✓	✓	✓	✓
Bouskoura	✓	✓	✓	✓	✓	✓	✓
Calamba	✓	✓	✓	✓	✓	✓	✓
Catania	✓	✓	✓	✓	✓	✓	✓
Crolles	✓	✓	✓	✓	✓	✓	✓
Kirkop	✓	✓	✓	✓	✓	✓	✓
Marcianise	✓	✓	✗	✗	✗	✗	✓
Muar	✓	✓	✓	✓	✓	✓	✓
Norrköping	✗	✗	✗	✗	✗	✗	✓
Rennes[1]	✓	✓	✗	✓	✓	✓	✗
Rousset	✓	✓	✓	✓	✓	✓	✓
Shenzhen	✓	✓	✗	✓	✓	✓	✓
Tours	✓	✓	✓	✓	✓	✓	✓
Other sites							
Castelletto	✓	✓	✓	✓	✗	✓	✓
Geneva	✗	✗	✗	✗	✗	✓	✓
Greater Noida	✓	✗	✗	✗	✗	✓	✓
Grenoble	✓	✓	✓	✗	✗	✓	✓
Le Mans	✗	✗	✗	✗	✗	✗	✓
Loyang	✓	✓	✗	✗	✗	✓	✓
Napoli	✓	✗	✗	✗	✗	✗	✓
Toa Payoh	✓	✓	✓	✗	✓	✓	✓
Total	**19**	**17**	**13**	**13**	**13**	**18**	**20**

[1] Rennes Space & High-Reliability Products.

Putting people first

0.12
total recordable case rate for employees and contractors

86%
employee engagement rate

13,700+
employees trained on diversity and inclusion

Futurestarters, ST Shanghai sales office, China

Health and safety

PUTTING PEOPLE FIRST

We constantly promote a culture of health, safety and well-being for all our employees and subcontractors.

24/7
dedicated support platform

0.12
total recordable case rate

48,900+
safety field visits

Employees, ST Bouskoura, Morocco

Health and safety is a priority at ST. We protect the health and safety of employees and contractors by preventing work-related injuries and illnesses and providing a safe working environment. We believe it is essential to invest in healthcare and the well-being of our people to create a positive working environment. These values are shared and reinforced across all our sites.

We have implemented a robust health and safety management system throughout our Company. We were one of the first semiconductor companies certified OHSAS 18001 at our main manufacturing sites in 2003. This has now been replaced by ISO 45001.

ISO 45001
certified

Our performance and management systems are evaluated annually through third-party surveillance audits, and certifications are renewed every 3 years. All sites follow our corporate occupational health and safety policy, which aims to establish and maintain best practices. In 2022, we audited nine sites through our legal compliance audit program. We also continued our internal corporate Environmental Health and Safety (EHS) audit program that aims to assess a site's performance against EHS objectives, programs, and procedures. This year, we audited seven sites. I 3-3 I

Health

Promoting employee health

In 2022, we carefully monitored the evolution of the COVID-19 pandemic and our corporate crisis team (CCT) continued to deploy protective measures. These included:

- regular communication with our employees according to the alert levels at each site

- prevention measures, such as personal protective equipment, hand sanitizer, social distancing, and working from home for eligible employees

Health and safety measures were implemented in accordance with local requirements.

We believe adopting a healthy lifestyle is the foundation for a fruitful and productive life. To support our employees, our various sites design health programs adapted to local legislation and requirements. Many sites offer regular medical check-ups. These may include blood analyses, chest x-rays, colorectal cancer immune cult tests, electrocardiograms, mammography, pap smear tests, prostate cancer screening, audiometric tests, ophthalmologic exams, and vaccinations.

Our Tours site (France) refurbished its medical center and revised its approach to healthcare assistance. The treatment room has been renovated to allow direct access from the clean room in the manufacturing area. This allows rapid treatment in the event of injury, as well as improved interaction between first aiders in the clean room and medical services. The direct exit also facilitates the removal of any workers that need to be transferred for further treatment.

Well-being

In 2020, we developed our STCare program through a partnership with Eutelmed. This platform provides 24/7 access to a dedicated confidential support platform, including a network of over 130 psychologists. The service is available to employees and their families and approximately 11,000 connections have been registered since its inception.

Caroline Marquer
Deputy Director, Healthcare Risk and International Department, Eutelmed

Our partnership with ST quickly developed into a robust and transparent collaboration. It provides individual and collective support tailored to the specific psychosocial and psychological needs of its employees and their families. Proximity to regions and sites allows us to be in contact with teams all over the world, to respond to both support and training requests."

We also offer support to our employees on site through protective and preventative actions. This includes e-learning for employees and managers, and prevention and well-being webinars and workshops. In 2022, around 5,500 employees attended awareness sessions on psychosocial risk prevention and quality of life in the workplace.

Safety

0.12
total recordable case rate

The collective efforts of our sites enabled us to achieve our best safety performance in 2022, with a recordable employee injury case rate of 0.10, better than our target of 0.14. The total recordable case rate, which includes injuries and occupational diseases, and covers employees and contractors, was 0.12, 20% lower than in 2021.

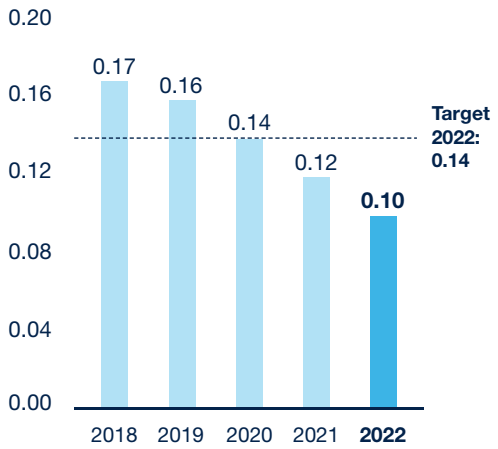
The severity rate related to employees' and contractors' injuries and illnesses also significantly decreased by 25% compared to 2021.

Total recordable case rate[1] for employees and contractors – injuries and illnesses | 403-9 | 403-10 |

	2021	2022
Total recordable case rate for employees and contractors	0.15	**0.12**

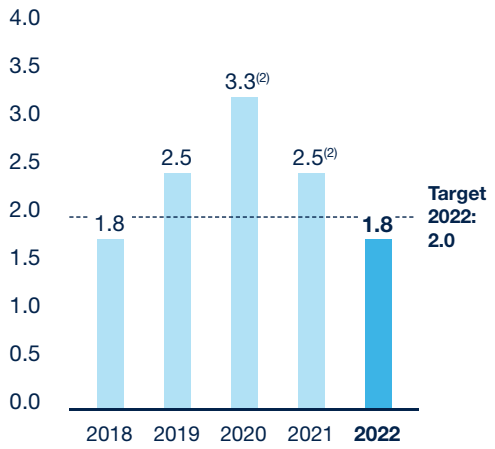
[1] Per 100 employees and contractors per year as defined by OSHA-US regulation.

Employee recordable case rate[1] – injuries
I 403-9 I



[1] Per 100 employees per year as defined by OSHA-US regulation.

Employee severity rate[1]



[1] Number of days lost per 100 employees per year as defined by OSHA-US regulation.

[2] Rate updated due to several prolongations after the closure of the previous reporting period.

Despite our efforts, we deeply regret the death of a subcontractor at our Greater Noida site (India) at the end of 2022. The subcontractor was the victim of a fatal accident while trying to move a mobile elevated working platform. We have conducted a thorough investigation to determine the reason and define additional corrective actions to prevent any recurrence.

Monitoring our performance

We are continually striving to strengthen safe behaviors and build engagement through positive reinforcement, continuous improvement and constant vigilance.

Everyone at ST is part of our shared vigilance approach and has a responsibility towards safety at work. To demonstrate a visible involvement and lead by example, managers are supported to conduct regular safety visits and inspections. In 2022, we improved our training for managers and implemented more ambitious targets for visits and internal audits. As a result, we increased the number of safety field visits by managers to 48,900, a 36% increase on the previous year.

48,900+

safety field visits

We encourage the reporting and investigation of near-misses, hazards, and unsafe behavior and conditions. Due to increased visits and investigations by managers, as well as improved hazard identification, more than 39,000 potential hazards were detected and investigated in 2022.

Advancing our practices

Within our Safety First program, we constantly strive to strengthen our safety culture by reinforcing safe behaviors and working conditions through visits, training, audits, communication, and best practice sharing. This year we provided an average of 7.4 hours of training per employee on EHS topics.

Each year we organize numerous safety events across our sites which are open to all employees. In 2022 for example, our Calamba site (the Philippines) organized a week dedicated to safety and environmental awareness with a series of engaging activities. These included an emergency response team competition, free health screening, safety games and a video contest.

Our Tours site (France) also organized a safety week, with educational workshops on the theme of road hazards and driving risks, and safety games on themes such as electrical and chemical risks, and shared vigilance. There was also an escape game and risk hunting activity.

Two of our French sites, Crolles and Rousset, organized critical incident simulations that involved external emergency services. These events were designed to test the effectiveness of their site

emergency response plans and aimed to challenge our capacity to manage emergencies and develop resilience.

FOCUS

SAFETY AWARD RECOGNITION

Our corporate safety and environment awards were set up to recognize robust prevention measures, constant proactivity, and strong safety practices at our sites. The awards review each site's performance, based on around 30 criteria. Two winners were selected in 2022. Our Shenzhen site (China) was recognized for its continuous commitment to high standards and its determination to launch initiatives that bring added value to the community. Our Catania site (Italy) received the award for its excellent safety performance results, which were above its targets.

Fabio Giubilante, Health and Safety Director at Catania, thanked all his team, adding, "this award is a result of the commitment of all our employees in Catania. We strive to constantly improve our health and safety management systems and programs, taking proactive measures and continually reinforcing our safety culture."

Contributing to the Sustainable Development Goals

Our commitments and programs as described above contribute to:

SDG target 3.8 – Achieve universal health coverage, including access to quality essential healthcare services and access to safe, effective, quality, and affordable essential medicines and vaccines for all.

SDG target 8.8 – Protect labor rights and promote safe and secure working environments for all workers.

2025 sustainability goal	Status	Comments
SG3: Reach a Recordable Case Rate of 0.15% or less by 2025 (work-related injuries and illnesses, including contractors).	✓	0.12%

Annual sustainability goal	Status	Comments
SG4: Maintain our Severity Rate at 2% or less each year (work-related injuries and illnesses, including contractors).	✗	2.40%
Subcontractors recordable case rate (injuries) of 0.24 or less.	✓	0.17%
Employee recordable case rate (injuries) of 0.14 or less.	✓	0.10%
Employee severity rate ≤2.0 (injuries).	✓	1.80%

Labor and human rights

PUTTING PEOPLE FIRST

We are convinced that companies play a vital role in respecting labor and human rights and we strive to be a role model.

79%
of employees covered by RBA audits

9
core principles in our due diligence approach

29
points above industry average RBA audit score

Employees, ST Crolles, France

Labor and human rights are a fundamental part of our culture and history. We believe companies play a vital role in implementing, respecting, and promoting labor and human rights. Our programs aim to ensure all our people are treated with respect and dignity, both within our own operations and throughout our supply chain (see **Responsible supply chain**).

Responsible Business Alliance
Advancing Sustainability Globally

The main management systems and programs we use to monitor, control and improve labor conditions in our operations are:

- a Corporate Labor and Human Rights policy and annual goals across our operations (available at **www.st.com**)
- an internal audit program on labor and human rights, targeting our manufacturing sites
- Responsible Business Alliance (RBA) human rights self-assessments at all major ST sites, and third-party RBA audits at our 11 largest manufacturing sites
- multiple initiatives to uphold human rights and mitigate risks in regions where we operate

I 3-3 I 2-23 I

Integrating human rights into our business

As a member of the RBA since 2005 (and currently a full member), we enforce the highest human rights standards. We have a comprehensive due diligence process that covers our potential and actual positive and negative impacts through nine core principles.

Freely chosen employment

ST does not use forced labor, including bonded, trafficked or slave labor, or involuntary or exploitative prison labor.

Fair wages and benefits

ST offers wages in compliance with all applicable laws, including minimum wages, overtime hours and legally mandated benefits.

Freedom of association

At ST, employees are free to choose whether or not to organize and join trade unions and bargain collectively.

Prevention of underage labor and protection of young workers

ST does not use child labor and protects young workers under the age of 18 to ensure they are not exposed to hazardous work.

Fair treatment, anti-harassment

ST does not tolerate any mistreatment of a worker by another worker; all workers must be treated fairly.

Fair working conditions and employee well-being

ST provides a safe and healthy working environment, conducive to employee well-being.

Fair organization of working time

ST maintains reasonable working hours and sufficient rest, in compliance with applicable laws and industry standards.

Non-discrimination

ST maintains a culture free of discrimination, where all individuals are treated with respect and dignity, and provides equal opportunities.

Privacy of personal information

ST safeguards the privacy of all personal data gathered.

Any concerns related to these principles can be reported through our grievance mechanism (see **Ethics and compliance**). | 3-3 |

Our approach

We apply a process based on RBA methodology to continually improve our management systems and mitigate or prevent any human rights abuses.

Commitment

We are committed to the RBA code of conduct and integrate its principles into our internal policies:

- ST Code of Conduct
- Corporate Labor and Human Rights policy
- Sustainability Charter

We deliver regular labor and human rights training at our manufacturing sites.

- More than 30 employees have attended RBA in-person training to enable them to deploy the RBA code of conduct and Validated Assessment Program (VAP) audit standard.
- In 2022, we trained 48% of our manufacturing employees on the RBA code of conduct, particularly on labor and human rights issues relevant for the local context.

Risk assessment

We conduct regular risk assessments to identify and evaluate actual or potential adverse human rights impacts.
Our risk assessment is based on:

- An assessment of the inherent risks related to our activities and locations.
- RBA risk self-assessment questionnaires, which our sites complete each year. In 2022, our sites scored from 60/100 to 95/100. Our sites' average score is 79/100, which is higher than the industry average of 73/100.
- A site-specific assessment to identify the labor and human rights risks associated with local operations at our major sites.

Audit programs

We run audit programs covering our manufacturing sites (79% of our employees).

- Our internal audits monitor compliance with our Corporate Labor and Human Rights policy (covering our nine core principles). They are conducted across all our manufacturing sites at least every 3 years.
- RBA third-party audits are conducted at our 11 largest manufacturing sites every 2 years, including closure audits when relevant.

Improvement actions

We identify and implement appropriate actions to prevent and mitigate adverse human rights impacts.

- Following a risk assessment, we develop and implement mitigation actions to prevent or minimize any labor and human rights impacts identified.
- Our internal and external audit results are followed up at both site and corporate level. Where appropriate, we implement corrective action plans to resolve any issues identified, and we verify completion of the actions.

Performance monitoring and review

We track and measure our progress to continuously improve our performance.

- We regularly monitor and review site performance against specific objectives and targets.
- We track our action plans to measure and improve their effectiveness in addressing adverse human rights impacts.

Communication

We communicate how we are addressing our risks and impacts.

- Our performance is reported publicly every year in our annual sustainability report.

Our audit programs

We run internal audits on labor and human rights at our manufacturing sites, and third-party RBA VAP audits at our 11 largest manufacturing sites. These audits highlight any gaps at the sites, help to identify areas that require improvement, and strengthen the local social responsibility culture.

In 2022, we conducted five labor and human rights internal audits. For this audit cycle, around 45% of the areas identified for improvement were related to management systems and 55% to labor and human rights core principles.

For RBA VAP (6.0/7.0) third-party audits, all 11 of our manufacturing sites eligible for the audit program have been audited within the last 2 years, either in an initial audit or a closure audit, or both.

- Our best performers with full compliance during the initial audit were our Agrate (Italy) and Calamba (the Philippines) sites.
- Initial audit results at our Muar (Malaysia) and Shenzhen (China) sites were well above the industry average of 144/200.
- For closure audits, our Crolles, Rousset and Tours sites (France), and our Bouskoura site (Morocco) were fully compliant, with a score of 200/200.
- Our Ang Mo Kio site (Singapore) managed to resolve 100% of the 11 non-conformances identified during the initial audit in March 2022, including the priority finding related to our on-site contractors' working hours.

Our average RBA audit score is above the industry average: +29 points in initial audits and +19 points in closure audits.

The main non-conformances identified during third-party RBA audits in 2022 are shown in the table below.

RBA audit results for ST operations in 2022 SDG 8.7

Number of audits: 10

Total of priority or major non-conformances			
Labor, Ethics		**Health and Safety**	
Working hours	2	Occupational injury and illness	2
Wages and benefits	1	Food, sanitation and housing	2
Freely chosen employment	2(1)	Occupational safety	1
Non-discrimination	1	Physically demanding work	1
Management systems		**Environment**	
Legal and customers requirements	1	Hazardous substance	2
Training	1		

Figures from 2017 onwards can be found in the table in People indicators › Page 89.

(1) One priority finding related to our on-site contractors' working hours. All other findings in the table are major ones.

RBA self-assessment questionnaire (SAQ) and VAP audit scores

Country	Site	SAQ score(1)	VAP score(2)
High risk			
China	Shenzhen	63.5	180.7
Malaysia	Muar	75.9	164.7
Singapore	Ang Mo Kio	59.6	200
The Philippines	Calamba	65.3	200
Medium risk			
Malta	Kirkop	83.6	200(3)
Morocco	Bouskoura	75.0	200
Low risk			
France	Crolles	86.3	200
	Rousset	84.9	200
	Tours	83.5	200
Italy	Agrate	78.5	200
	Catania	78.5	200(3)

Initial audit Closure audit

(1) SAQ score: low risk ≥85, medium risk ≥65 & <85, high risk <65.
(2) Full marks = 200/200
(3) Audits conducted in 2021. All other audits were conducted in 2022.

Following both internal and external audits, we have implemented improvement plans to reinforce existing social management systems.

Shahrom Tumin
HR Director, ST Muar (Malaysia)

I have been working on labor and human rights programs for 12 years. It's very rewarding to see our progress and the benefits that are delivered. ST is now widely recognized for its efforts to address labor and human rights issues and we are considered a leading employer by prospective employees in sourcing countries. We work closely with the RBA office in Malaysia and are regularly invited to share our experience with other companies. We were also proud to participate in a government consultation on the new National Action Plan for Forced Labor 2021–2025, which aims to eliminate forced labor in Malaysia."

Our risks and improvement actions

In 2022, the main risks we identified and the preventive and remediation actions we implemented are detailed in the table below.

Description	Actions implemented
Control and monitoring of working hours (including rest days)	• Reinforced monitoring of working hours and rest days. • Raised awareness on preventing and detecting anomalies.
Prevention of forced and bonded labor	• Implemented corporate guidelines for personal and education loans, and training fees. • Reinforced local monitoring process of recruitment, hiring, employment and repatriation fees to ensure they are not paid by workers.
Student protection and management	• Implemented corporate guidelines for student employment and management, including allowances.
Awareness of RBA standard and workers' rights	• Designed and distributed informative posters, including a focus on prevention of forced labor and reasonable working time.

Our improvement action plans are defined at site level with the relevant stakeholders. They are then reviewed and challenged at corporate level to enhance our management systems, share best practices, reduce risks, and identify opportunities.

They include:

- determination of root cause(s)
- description of the preventive and corrective actions to address the root cause(s) identified and prevent future recurrence of the issue(s)
- the date the actions are expected to be completed

These action plans are defined, implemented, and reviewed following defined timelines, and we verify that the findings are closed. They may address policy or procedure changes, communication or training, activity, and impact measurements. I 409-1 I

FOCUS

CONTINUOUSLY IMPROVING AWARENESS ON WORKERS' RIGHTS

In addition to regular online or in-person training, our Agrate and Castelletto sites (Italy) launched their first 'RBA day' on October 26 and November 22, respectively. This event took place during the lunchbreak to improve workers' awareness of their labor rights and our commitment to each pillar of the RBA standard: labor and human rights, health and safety, environment, ethics, and supply chain management. The event featured a booth with posters and brochures explaining the RBA requirements, RBA-trained employees presenting the standard and answering questions, and a quiz for workers to challenge themselves on their knowledge of the RBA standard. More than 750 workers participated in the quiz at both sites, and the results demonstrated that the participants had a high level of awareness. To conclude, all participants left with a small gardening kit with the reminder 'RBA day – forget me not'.

Going beyond labor and human rights

Since its launch in March 2020, our STCare program has been improved to go beyond psychosocial risk prevention and protection, and employee assistance (see **Health and safety**).

In 2022, we expanded STCare to cover employee well-being, based on four domains:

- effective leadership
- caring culture
- working environment
- wellness benefits

We will define and implement a global framework with minimum standards in 2023, based on internal and external best practices.

Our sites implemented many initiatives to nurture employee well-being. For example, our Bouskoura site (Morocco) has built an on-site nursery that can host up to 40 children from 3 months to 4 years old to support our employees in parenthood and ensure a better work-life balance.

Contributing to the Sustainable Development Goals

Our commitments and programs as described above contribute to:

SDG target 8.7 – Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking, and secure the prohibition and elimination of the worst forms of child labor.

SDG target 8.8 – Protect labor rights and promote safe and secure working environments for all workers.

SDG target 17.16 – Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.

2025 sustainability goal	Status	Comments
SG5: Get 100% of ST's largest manufacturing sites recognized for social responsibility by external international bodies by 2025.		91% of largest manufacturing sites 10/11 RBA platinum recognition or a score of 200/200*

* Status related to the last closure or initial RBA VAP third-party audit.

Annual sustainability goal	Status	Comments
100% of priority, major and minor non-conformities closed during the RBA closure audit (annual objective)	✓	100% of findings closed (25/25)
100% of all manufacturing sites audited every 2 years for compliance with the RBA standard (annual objective)	✓	100% of our largest manufacturing sites audited (11/11)

Talent attraction and engagement

PUTTING PEOPLE FIRST

We aim to offer the best employee experience in all the locations where we operate to attract and retain a diverse workforce.

86%
employee engagement score

47
average hours of training per employee

19,000+
employees trained on leadership model

Employees, ST Tours, France

Recruiting and retaining the best talent is a critical cornerstone to supporting and sustaining our business growth ambitions. It enables us to address the staffing challenges we face, such as the competitive labor market, the size of the labor pool, skills shortages in certain domains, and the need to continually rejuvenate our workforce. I 3-3 I

Our ambition is to be recognized as a market-leading, attractive, and innovative employer where entrepreneurial spirit, feedback, cooperation, responsibility, and leadership are the norm.

Transforming to meet future challenges

Our growth ambitions depend on our ability to transform and adapt to challenges in a constantly changing environment.

In 2022, we launched a company-wide human capital transformation program called 'Horizon – aiming for the future' to improve our capabilities to support our business strategy. This employee-centric program aims to positively transform the experience of everyone at ST.

It is based on four pillars:

- culture and ways of working
- diversity, equity and inclusion
- talent management
- career paths at ST

Reinforcing our leadership culture

We strongly believe all employees are leaders.

As the first step in our transformation journey, we launched a new leadership model that guides how we work with internal and external stakeholders. We used this model to translate our values into the following behaviors:

Smart thinking
- Making decisions
- Developing expertise

Agile delivery
- Delivering on promises
- Taking ownership

Engaged people
- Collaborating
- Empowering

Bold leadership
- Being courageous
- Communicating with conviction

To ensure all employees understand the new leadership model and its associated behaviors, we trained 365 ambassadors to deliver awareness sessions throughout the Company, involving more than 19,200 participants.

The new model is being embedded into all our people processes (talent selection, assessment, development, succession planning, and performance management) and used as the basis for decision-making, rendering it the common language of talent in our human resources lifecycle.

Inspiring future talent

To support our ambitious recruitment goals, we hired more than 2,900 exempt[1] employees in 2022. We also launched a refreshed employer branding campaign in July 2022 called '#Futurestarters', to reinforce our reputation as a people-driven, high-tech leader.

2,900+
exempts hired

Our employer branding campaign highlights that ST is committed to building innovative and pioneering technologies for a better, smarter, and sustainable world. Featuring ST employees, it also reinforces the sense of belonging and pride people feel about working at ST.

Ede Kossari Tarnik
Environmental and Energy Champion, Kirkop (Malta)

At ST, we are all 'Futurestarters'! This means that all of us, as one ST, can contribute to shaping a smarter and greener future for future generations. When I started my job 1 year ago, I was impressed by ST's leadership and commitments in sustainability. I am proud to contribute to achieving our objectives by reinforcing the importance of creating a more sustainable future throughout the organization."

To help attract talent, our people act as ST ambassadors during external events, such as campus fairs, job fairs and conferences, as well as on social media. More than 330 ambassadors shared their experience as ST employees during the year, showcasing our opportunities and promoting ST as a great place to work.

[1] Employees who hold positions normally requiring graduate or post-graduate education and who are not eligible for overtime compensation.

In 2022, we continued to build strategic partnerships with universities and engineering schools throughout the world to ensure a regular flow of candidates, while also establishing education pathways to respond to our specific skills needs. One example is I-NOVMICRO, an innovation program designed to develop and promote microelectronics and electronic training paths in the south of France.

53

strategic partnerships with universities

During 2022, we collaborated with 53 strategic academic partners globally and over 250 sourcing partners.

Developing and supporting our talent pool

Our ambition is to become a top global employer with a diverse and high-performing workforce centered on collective and individual performance. We aim to improve employees' experience throughout their career at ST through holistic, flexible and dynamic talent management, boosted by internal mobility and development opportunities.

To support this ambition, we are starting to transform, simplify and digitalize our talent management processes (recruitment, onboarding, workforce planning, succession planning, talent review, career path, capability management, and learning and development) with a full co-design approach involving managers and employees.

Feedback is a core pillar of our management culture, enabling us to strengthen and continuously develop our talent pool. Since 2021, we have encouraged employee-manager relationships built on open and continuous feedback.

Coaching also helps to spread ST's culture of feedback and leadership and is embedded in our managerial ethos. We delivered 170 individual coaching sessions and 43 team coaching sessions in 2022 to support the career development of our people and enhance organizational performance.

We continued the talent review process initiated in 2020, prioritizing the succession plans of executives approaching retirement age. We are on track with our roadmap, including assessments, development, and talent acquisition.

In addition, we continued to diversify our learning offer to train people faster, more easily, and more efficiently, with more than 350 online courses from various content providers, available to more than 30,800 employees.

Average

47

hours of training per person

We also used an external digital platform to successfully pilot the development of technical skills for certain jobs: 373 ST engineers completed 5,400 training hours on 420 online courses, gaining 347 certificates.

On average, we delivered 47 hours of training per person in 2022.

I 3-3 I

Achieving the full potential of our people

Helping our people achieve their full potential by meeting their aspirations is essential if we are to face our current and future challenges successfully.

Listening to our employees

We aim to deliver the best employee experience we can, from the very first touchpoint right throughout their career.

Listening to our employees is vital for monitoring our transformation and organizational changes.

ST recognized as a

top employer

in France and in Italy

The initiatives and measures we have put in place allowed us, once again, to be independently ranked as a 'Top Employer 2023' in France and Italy, by Top Employers Institute.

We see hybrid work as a critical enabler to attract and retain talent. We therefore implemented a company-wide framework for flexible working arrangements, such as working from home or from another site, in compliance with local regulations.

At the end of 2022, 49% of our employees were under 40 years old. By the end of 2025, they will represent 75% of our workforce. Listening to them is essential to understand how to improve the employee experience and make ST an attractive and engaging place to work. With this in mind, we launched our 'Blossom' program 2 years ago to allow them to voice their opinions, offer their ideas, be creative, and share their expectations. By the end of the year, more than 8,000 'blossomers' were engaged in this community and involved across our regions and organizations in numerous projects, such as panel discussions, working groups, and meetings.

FOCUS

ENCOURAGING OPEN DIALOG BETWEEN SENIOR MANAGEMENT AND YOUNGER TALENT

Fostering a culture of open dialog between senior management and younger generations is vital. It enables us to share mutual expectations, while continuing to enhance the employee experience and make ST a more attractive and engaging place to work.

In June 2022, we held our first Blossom event in Geneva for ST employees under 40 years old. Seventeen Blossom representatives from around the world were invited to a unique meeting with the Executive Committee. During an open question and answer session with ST President and CEO Jean-Marc Chery and the eight members of the Executive Committee, they discussed how to attract new generations and what senior management expects from the Blossom network. They also had the opportunity to discuss human resources topics with ST's President of Human Resources and Corporate Social Responsibility, along with the importance of the 'blossomers' role in attracting new talent.

Another example was a roundtable organized in Shanghai in September 2022 for Blossom newcomers, attended by Henry Cao, Executive Vice President, Sales and Marketing China region. Participants freely exchanged ideas and received career development guidance from the China leadership team, with the aim of building mutual understanding and fueling their career aspirations with ST China.

Sustaining a high level of engagement

Employee engagement is a critical driver of organizational performance to achieve our business objectives.

Employee engagement score at

86%

In 2022, we changed our annual census survey on individual engagement, goal alignment, and organizational agility, to every 2 years. In between, we will conduct focus surveys to gain insights into specific subjects.

At the end of 2022, we conducted our first focus survey on diversity, equity and inclusion (see **Diversity, equity and inclusion**). It also included five questions to measure employee engagement.

The participation rate was 67%. Although this is below the response rate we usually achieve for our full census surveys, it is higher than the response rate typically seen for this kind of survey.

The overall engagement index was 86%, three points higher than 2021 and two points above the GHP norm[2].

- 85% of respondents said they were willing to go the extra mile to help ST meet its goals. This is equal to the 2021 score.
- 88% of respondents said they are proud to work for ST, two points up on 2021.
- 86% recommended ST as a great place to work, three points higher than 2021.

Reward and recognition

Our compensation and benefits policy is a critical part of our employee value proposition, supporting our growth and recognizing the contribution of our people.

We offer a short-term incentive scheme to more than 21,000 employees. As well as rewarding operational performance, it also recognizes the achievement of our sustainability objectives through a dedicated sustainability index focusing on four of our priorities:

- safety
- climate change
- diversity
- employee engagement

The same sustainability index applies to every ST employee, including senior management.

The sustainability index is also one of the three criteria for the long-term incentive (performance stock awards) scheme. In 2022, we increased the number of people eligible for our long-term incentive scheme by more than 1,200, to include more young and entry-level talent.

2022 was the year when we could once again hold a corporate ceremony in person as part of our annual STAR awards corporate recognition scheme. With more than 2,600 winners, we took employee recognition far beyond previous levels. We also granted a one-off 'COVID-19 crisis management' award to acknowledge efforts made at site and organization level to ensure employees' health and safety, safeguard our business continuity, and help our local communities during the pandemic.

In addition, as part of our new Leadership Model, we presented our first Leadership awards during our Business Plan Meeting in December 2022. The Leadership awards will be rolled out globally in 2023.

Contributing to the Sustainable Development Goals

Our commitments and programs as described above contribute to:

SDG target 4.3 – Ensure equal access for all women and men to affordable and quality technical vocational and tertiary education, including university.

2025 sustainability goal	Status	Comments
SG22: Achieve an employee engagement rate of at least 10 percentage points above local norms in all major countries by 2025.		3 out 13 countries*

* Germany, Switzerland, USA. All countries are above the local norms but only three of them are at least 10 percentage points above. Our previous supplier, CultureIQ, was acquired by Perceptyx. The calculation method for the country norms used by Perceptyx is different from the one used by CultureIQ.

[2] GHP norm: Global High Performance norm, global, cross industry, benchmark made up of the 75th percentile score for any given item across all organizations surveyed by our partner.

Diversity, equity and inclusion

PUTTING PEOPLE FIRST

We believe that diversity enables innovation and stakeholder engagement as well as personal and company growth.

35%
women in our workforce

80%
DEI overall index score

13,700+
employees trained on DEI

Worldwide ST employees

With over 50,000 people spanning 118 nationalities and 40 countries, we are a global company working together as one team. We are convinced that diversity, equity and inclusion (DEI) have a positive impact on innovation and stakeholder engagement, as well as personal and Company growth.

Our diversity, equity and inclusion vision

At ST you can be the true version of yourself

Our aim is to foster an equitable and inclusive workplace where people feel supported to be their authentic selves and reach their full potential. The uniqueness of each employee is what gives ST its strength.

To help us achieve these aspirations, we accelerated our efforts towards a cultural transformation of the Company in 2022.

Attract diversity

Grow equity

Develop inclusion

Changing behaviors and culture takes time. An important step on this journey is to understand where we stand today in terms of employee experience with DEI. For this reason, at the end of 2022 we conducted our first DEI focus survey to understand our progress so far in creating a diverse, equitable, and inclusive workplace.

The survey covered a range of DEI-related topics, including belonging, psychological safety, access to success, manager commitment and anti-discrimination. Our overall DEI index score (the percentage of people who replied positively to the questions) was 80%, which is three points below the GHP norm[2].

The survey results are being analyzed as part of a maturity assessment by an external firm specialized in DEI analytics and advice. The results of this assessment are expected in 2023. They will help us understand our baseline and build a unique roadmap with actionable steps and clear milestones. I 3-3 I

Attracting diversity

Reinforcing our employer branding

Diversity is an important pillar of our employer value proposition. Our ambition is to attract, recruit and retain a diverse workforce, particularly in terms of gender, age, and disability.

Recruiting more women

At the end of 2022, women represented 35% of our global workforce and 25% of our exempts[3]. In an under-represented technical field, we reached our target of hiring 30% women for exempt positions for the second year in a row.

Our target for 2025 is to increase the percentage of women at all management levels to 20%. As shown in the table below, we continue making progress at executive management levels, with an increase of 30% in 2022.

30%

women hired in exempt positions

In 2021, 12% of our executive officers were women, however, this dropped to 9% in 2022. This was due to a shortage of women in our internal talent pool to fill the promotions required to sustain the rapid growth of our Company. However, senior management is committed to continuing our efforts to ensure 30% of recruits in executive positions are women.

Women in management (%) I 405-1 I SDG 5.5

	2018	2019	2020	2021	2022
Experienced managers	16	18	19	20	**20**
Directors and senior managers	12	13	13	14	**15**
Executives (total)	9	9	10	10	**13**
of which Senior Management[1]	4	4	4	12	**9**
Total women in management positions	**17**	**17**	**17**	**18**	**19**
Women on the Supervisory Board	33	44	44	44	**44**

(1) Senior Management, as defined in the Dutch Statutory Annual Report (IFRS), corresponds to our Executive Committee and Executive Vice Presidents.

Attracting young talent

Our workforce is highly skilled and experienced, with staff turnover in our engineering and management population of just 7%. To continue to build our capacity for long-term success, however, we also need to attract young talent. Our STEM program, launched in 2018, continues to go from strength to strength, helping to encourage young people, particularly women, to choose

(2) GHP norm: Global High Performance norm, global, cross industry, benchmark made up of the 75th percentile score for any given item across all organizations surveyed by our partner.

(3) Employees who hold positions normally requiring graduate or post-graduate education and who are not eligible for overtime compensation.

technical studies at an early stage of their education, while also helping to address the shortage of women in our industry (see **Community and education**).

Hiring and inclusion of people with disabilities

We aim to recruit and retain a diverse workforce that reflects wider society, including people with different abilities.

In 2022, ST Shenzhen (China) launched an innovative project called 'Devoted to Employing and Engaging the Disabled'. With a focus on improving disability inclusion in the workplace by adapting workflows and employee awareness, the project has helped to increase the number of disabled people working at the site from two people in 2021 to nine in 2022. This initiative also won first place in our 'ONE award' program for best local DEI initiative across our back-end manufacturing sites.

In France, we have strengthened our partnerships with providers specializing in diverse recruitment, such as Hello Handicap, Agefiph, Job in Live, GETH, FIAM, and LinkDay. As a result, ST France hired 29 people with disabilities in 2022, bringing the total to nearly 600 employees with disabilities.

As a part of European Week for the Employment of People with Disabilities in November 2022, ST took part in several activities involving employees and people with disabilities. In France, ST employees shared a typical workday with an unemployed disabled counterpart, while in Italy, all the directors teamed up with sports champions with disabilities to learn about overcoming limits through the metaphor of sport. In both countries, these activities were followed up with webinars that attracted over 600 and 700 participants respectively.

Reviewing workplace flexibility

We are conscious that to attract diverse talent, we need to offer more flexible working options. In 2022, we deployed our hybrid and flexible working models across all regions. We believe that this will have a positive impact on ST employees' experience, as well as on our employer branding and attractiveness.

Growing equity

Remuneration and career opportunities

We value all employee contributions and have zero tolerance for any kind of discrimination. Our objective is to safeguard equity in development, career opportunities, and remuneration. Following the global rollout of our pay gap index, we recorded an overall gender pay ratio of 99.3% in 2022, averaged across job grades and normalized by country. However, as the table below shows, the ratio declined by 0.7 points, largely due to an increase in the operator pay gap. The relevant regions and organizations are working to close these gaps.

Gender pay ratio
99.3%

Gender pay gap ratio[1] (%)

		2021	2022
Operators		95.3	91.2
Non-exempts		100.8	102.6
Exempts	Non-management	99.3	99.1
	Management	96.6	96.8
	Executive	113.1	108.6
Total		**100.0**	**99.3**

[1] Includes base and variable salary.

Supporting women's career development

We are committed to strengthening the role of women in building the future of our Company. To support this, we have developed a two-step training program to prepare the next generation of female leaders.

600+

participants in our women leadership program

The program begins with the Women in Leadership (WIL) training, targeted at junior and middle management. The training focuses on becoming a confident, authentic leader and the importance of building a network. In 2022, more than 100 women across all regions participated in 11 sessions.

Our Advanced Women in Leadership (AWIL) training, launched in 2021, is aimed at senior women managers and directors to help them identify their leadership style and become more visible and recognized within ST. It is a five-step blended learning training, including a two-day workshop, individual coaching, self-awareness, and a personal development plan. In 2022, we delivered nine sessions across all regions, training 88 women in total.

This training program plays a key role in preparing the pipeline of women for executive management positions within ST. Since the inception of WIL in 2015, we have delivered over 60 sessions, including AWIL, across all regions, with more than 600 women trained. In 2023, we are planning 20 sessions to train around 200 women. The ultimate aim is to increase the proportion of women at all levels of management.

In addition to the growing network of WIL and AWIL alumni in the Company, we are working on launching our first global women's network in 2023, open to women and allies from all regions, organizations and job levels. The network will be aimed at addressing key topics such as career progression, work-life balance and much more, through mentoring, sharing sessions, and webinars.

Frédérique Le Grevès
Executive Vice President, Europe and France Public Affairs President and CEO, STMicroelectronics France

I believe diversity brings different perspectives, and we know that diversity plays a key role in supporting sustainable growth and fostering innovation. Keeping this in mind, at ST we are working on developing a women's career path with a holistic approach and I see that as a priority across the Company. To add to this, we are amidst a cultural transformation with a key focus on creating an inclusive environment, free of bias and stereotypes."

ST women have been increasingly active in the public sphere, showcasing their work, giving speeches and participating in panel discussions at a variety of high-profile events. These include the Global Women's Forum, IEEE Women in Engineering network, Women in Science and Engineering, Women in Semiconductor and Hardware, and many more.

FOCUS

REINFORCING OUR COMMITMENT

United Nations Women Empowerment Principles (UN WEP) is a set of principles offering guidance to businesses on advancing gender equality and women's empowerment in the workplace, marketplace, and community.

WOMEN'S EMPOWERMENT PRINCIPLES

By joining the WEP community, ST is showing its commitment to this agenda by working collaboratively in multistakeholder networks to foster business practices that empower women. These include equal pay for work of equal value, gender-responsive practices and zero tolerance against sexual harassment in the workplace.

"Signing the WEP reinforces our commitment to empowering women and fostering an equitable and inclusive workplace. In addition, it takes it one step further by extending this commitment towards building a gender-diverse and inclusive society," said Jean-Marc Chery, President and CEO, STMicroelectronics.

In Italy, ST was listed as one of 'Best Employers for Women 2023' for the second year in a row by the German Quality Institute ITQF and its media partner La Repubblica Affari & Finanza based on social listening on a huge database of Italian employers.

Developing inclusion

Creating awareness

We aim to overcome stereotypes by continuously reinforcing an inclusive mindset that recognizes the value and richness of a diverse workforce.

To help us achieve this, we provide two main training courses:

- diversity and inclusion e-learning
- unconscious bias workshops

We accelerated the delivery of these courses throughout 2022, in line with our commitment to foster an inclusive culture that values everyone and addresses bias and stereotypes. In 2022, over 5,900 employees completed our diversity and inclusion e-learning course, a 60% increase on 2021.

Since launching the program in 2019, more than 13,700 employees have completed the training.

In 2022, we worked on a new e-learning that encompasses a range of topics not previously addressed, such as microaggressions, inclusive communication, LGBTQ+ and allyship. The training will be launched in 2023 and available in four languages.

2,000+

people trained on unconscious bias

More than 2,000 employees from all regions where we operate participated in unconscious bias workshops in 2022. The workshop is supported by a team of more than 50 internal trainers. During these workshops, participants explore how their own unconscious bias and micro behaviors can impact their decision-making and learn how to be more attentive and mindful when interacting with others.

We also published an internal transgender inclusion guide in 2022, with information on gender transition and allyship in the workplace. In our commitment to ensuring a safe, equitable and inclusive environment for everyone, the guide explains how ST will support the journey of transitioning employees regardless of the external legal, social and community context.

Contributing to the Sustainable Development Goals

Our commitments and programs as described above contribute to:

SDG target 5.5 – Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.

SDG target 10.2 – By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, disability, race, ethnicity, origin, religion or economic or other status.

2025 sustainability goal	Status	Comments
SG8: Reach at least 20% women in every management level by 2025.		20% (experienced managers) 15% (directors and senior managers) 13% (executives)

Annual sustainability goal	Status	Comments
SG7: Recruit at least 30% women in all exempt positions every year.	✓	30%
Recruit at least 60% of new non-manufacturing employees with less than five years' experience	✗	58%

People indicators

This section includes indicators and GRI Standard disclosures.

DEFINITIONS

-	Data not available or not required.
NA	Not applicable.
Operator	Employees working in production operations.
Non-exempt	Employees who hold positions normally requiring higher education and who are eligible for overtime compensation.
Exempt	Employees who hold positions normally requiring graduate or post-graduate education and who are not eligible for overtime compensation.
Direct workers	Workers employed directly by ST.
Indirect workers	Workers employed by a third-party, such as interim agencies.

Headcount evolution by region[1] | 2-7 |

	2018	2019	2020	2021	2022
Americas	744	761	766	759	**789**
Female	183	192	188	185	**212**
Male	561	569	578	574	**577**
Asia Pacific	18,828	18,398	18,276	18,951	**19,829**
Female	7,848	7,484	7,432	7,616	**8,202**
Male	10,980	10,914	10,844	11,335	**11,627**
Europe	21,464	21,633	22,594	23,668	**25,096**
Female	5,296	5,320	5,616	5,941	**6,392**
Male	16,168	16,313	16,978	17,727	**18,704**
Mediterranean	4,917	4,762	4,380	4,876	**5,656**
Female	2,741	2,667	2,396	2,722	**3,175**
Male	2,176	2,095	1,984	2,154	**2,481**
Total	**45,953**	**45,554**	**46,016**	**48,254**	**51,370**
Female	16,068	15,663	15,632	16,464	**17,981**
Male	29,885	29,891	30,384	31,790	**33,389**

[1] Includes direct and indirect workers.

Employees by gender and by category | 405-1 |

	2018	2019	2020	2021	2022
Number of operators		**15,794**	**15,894**	**16,524**	**17,343**
Female (%)	55%	56%	54%	54%	**56%**
Male (%)	45%	44%	46%	46%	**44%**
Number of non-exempts		**10,024**	**9,598**	**10,302**	**10,704**
Female (%)	22%	22%	22%	22%	**22%**
Male (%)	78%	78%	78%	78%	**78%**
Number of exempts		**19,736**	**20,524**	**21,428**	**23,323**
Female (%)	23%	23%	24%	24%	**25%**
Male (%)	77%	77%	76%	76%	**75%**

External hires in manufacturing (%)

	2018	2019	2020	2021	2022
Jobs filled externally vs overall jobs filled	98	96	97	97	**96**

Hires by job type | 401-1 |

	2018	2019	2020	2021	2022
Operator	11,379	6,687	6,345	8,687	**7,588**
Female	3,938	2,114	1,870	3,125	**3,828**
Male	7,441	4,573	4,475	5,562	**3,760**
Non-exempt	2,760	3,033	2,473	3,255	**1,849**
Female	557	635	523	692	**316**
Male	2,203	2,398	1,950	2,563	**1,533**
Exempt	2,385	2,603	2,121	2,710	**2,923**
Female	733	713	573	808	**894**
Male	1,652	1,890	1,548	1,902	**2,029**
Total	**16,524**	**12,323**	**10,939**	**14,652**	**12,360**
Female	5,228	3,462	2,966	4,625	**5,038**
Male	11,296	8,861	7,973	10,027	**7,322**

Hires by age group (%) | 401-1 |

	2018	2019	2020	2021	2022
Under 30 years old	78	72	72	73	**63**
30-50 years old	20	26	27	25	**32**
Over 50 years old	2	2	1	2	**5**

Hires by region (%) | 401-1 |

	2018	2019	2020	2021	2022
Americas	0	1	1	1	**1**
Asia Pacific	68	65	61	56	**46**
Europe	22	26	32	34	**40**
Mediterranean	10	8	6	9	**13**

Workforce by employment type (% of workers) | 2-7 |

	2018	2019	2020	2021	2022
Full-time contract	97	97	97	97	**98**
Female	94	94	94	95	**95**
Male	99	99	99	99	**99**
Part-time contract	3	3	3	3	**2**
Female	6	6	6	5	**5**
Male	1	1	1	1	**1**

Workforce by employment contract (% of workers) | 2-7 |

	2018	2019	2020	2021	2022
Permanent contract	95	97	97	96	**96**
Female	94	96	96	94	**93**
Male	96	98	97	97	**97**
Temporary contract[1]	5	3	3	4	**4**
Female	6	4	4	6	**7**
Male	4	2	3	3	**3**

[1] Includes direct and indirect workers.

Workforce by employment contract by region (% of workers) | 2-7 |

	2018	2019	2020	2021	2022
Permanent contract					
Americas	99.6	99.3	99.7	99.6	**99.5**
Asia Pacific	98.8	99.4	98.8	99.7	**99.7**
Europe	94.7	97.1	95.8	95.0	**96.0**
Mediterranean	82.2	89.2	92.6	86.5	**78.7**
Temporary contract[1]					
Americas	0.4	0.7	0.3	0.4	**0.5**
Asia Pacific	1.2	0.6	1.2	0.3	**0.3**
Europe	5.3	2.9	4.2	5.0	**4.0**
Mediterranean	17.8	10.8	7.4	13.5	**21.2**

[1] Includes direct and indirect workers.

Workforce by employment relation (% of workers) | 2-7 | 2-8 |

	2018	2019	2020	2021	2022
Direct relation[1]	97	99	98	98	**99**
Indirect relation[2]	3	1	2	2	**1**

[1] Workers employed directly by ST.
[2] Workers employed by a third-party, such as interim agencies.

Remuneration (%)

	2018	2019	2020	2021	2022
Employees below the ST minimum salary scale in their job grade (exempt)	14	13	13	9	**11**
Employees with individual salary increase	84	83	30	96	**87**

Benefits, bonus & Unvested Stock Awards | 201-1 |

	2018	2019	2020	2021	2022
Eligible (exempt >JG 11) employees receiving unvested stock awards (%)	29%	30%	27%	26%	**28%**
Number of employees rewarded	5,140	5,590	5,070	5,126	**6,400**

Number of nationalities in the headcount by region[1] | 405-1 |

	2018	2019	2020	2021	2022
Americas	21	21	21	20	**22**
Asia Pacific	35	34	35	35	**35**
Europe	87	87	87	102	**110**
Mediterranean	47	50	46	50	**52**
Total	**105**	**105**	**103**	**115**	**118**

[1] Expatriates and assignees are counted in host country.

Number of nationalities in Executive Committee | 405-1 |

	2018	2019	2020	2021	2022
Different nationalities represented in the Executive Committee	6	6	6	6	**11**

Employees by gender and by region (%) | 405-1 |

		2018	2019	2020	2021	2022
Americas	Female	25	25	25	24	**27**
	Male	75	75	75	76	**73**
Asia Pacific	Female	42	41	41	40	**41**
	Male	58	59	59	60	**59**
Europe	Female	25	25	25	25	**25**
	Male	75	75	75	75	**75**
Mediterranean	Female	56	56	55	56	**56**
	Male	44	44	45	44	**44**

Average[1] overall turnover rate[2] by age group (%) | 401-1 |

	2018	2019	2020	2021	2022
Under 30 years old	56	49	40	42	**25**
30–50 years old	9	9	8	10	**8**
Over 50 years old	6	6	7	6	**5**

(1) Turnover rate calculated on average headcount in activity throughout the year.
(2) Resignations, retirements and dismissals.

Average[1] turnover rate (%) | 401-1 |

	2018	2019	2020	2021	2022
Average voluntary turnover rate[2]	18.3	16.1	12.6	14.6	**10.3**
Average overall turnover rate[3]	20.1	17.7	14.0	16.0	**12.0**

(1) Turnover rate calculated on average headcount in activity throughout the year.
(2) Resignations.
(3) Resignations, retirements and dismissals.

Average[1] overall turnover rate[2] by gender, by category and by region in 2022 (%) | 401-1 |

	Operator		Non-exempt		Exempt	
	Female	Male	Female	Male	Female	Male
Americas[3]	NA	NA	13.3	25.0	5.2	10.1
Asia Pacific	23.7	45.2	7.9	18.2	10.5	11.6
Europe	5.3	3.8	4.6	4.1	4.3	4.5
Mediterranean	5.4	13.7	2.4	7.1	16.2	15.3

(1) Turnover rate calculated on average headcount in activity throughout the year.
(2) Resignations, retirements and dismissals.
(3) The Company has no manufacturing sites in these regions.

Average employee age by category

	2018	2019	2020	2021	2022
Operator	34	35	36	35	**35**
Non-exempt	39	39	40	40	**40**
Exempt	44	44	44	44	**44**
Average employee age (years)	39	40	40	40	**40**

Employees by category and by age group in 2022 (%) | 405-1 |

	Under 30 years old	30–50 years old	Over 50 years old
Operator	41	48	11
Non-exempt	25	55	20
Exempt	15	54	32

Promotion ratio female/male by category and by region in 2022 (%) SDG 5.5

	Operator		Non-exempt		Exempt	
	Female	Male	Female	Male	Female	Male
Americas[1]	NA	NA	18	NA	21	18
Asia Pacific	9	12	18	15	13	13
Europe	12	9	10	9	17	14
Mediterranean	11	6	18	17	17	12

(1) The Company has no manufacturing sites in these regions.

Disabled employees (%) SDG 10.3

	2018	2019	2020	2021	2022
Disabled people employed as % of total workforce	1.6	1.8	2.0	1.9	**1.9**

Career development (%)

	2018	2019	2020	2021	2022
Employees with a promotion in the year	11	10	8	12	**12**
Employees with a job function change in the year	2	2	2	2	**2**

Employee yearly Individual Performance Management (%)
I 404-3 I

	2018	2019	2020	2021	2022
Operator	81	84	70	93	**83**
Female	72	77	54	92	**81**
Male	92	94	90	94	**84**
Non-exempt	91	90	92	52	**75**
Female	89	87	89	60	**76**
Male	92	92	93	49	**75**
Exempt	97	95	97	94	**92**
Female	96	95	96	94	**91**
Male	97	96	97	94	**93**
Total	**89**	**90**	**85**	**85**	**85**
Female	80	82	70	88	**84**
Male	95	95	97	83	**86**

Employees with a formal career development review[1] (%)
I 404-3 I

	2018	2019	2020	2021[2]	2022
Non-exempt	39	47	50	13	**36**
Female	44	51	55	18	**39**
Male	36	45	48	12	**35**
Exempt	57	64	66	18	**54**
Female	60	66	68	19	**55**
Male	56	63	66	18	**54**

(1) Operators are managed through a different process.
(2) New performance review system implemented in Q2 2021. Cycle extended to Q1 2022.

ST population recognized through the technical ladder[1] (%)

	2018	2019	2020	2021	2022
Asia Pacific	3.7	3.5	3.5	3.8	**7.1**
Europe & Mediterranean	6.7	6.7	6.9	7.1	**4.0**
Worldwide	5.8	5.7	5.8	6.0	**6.1**

(1) The specified path starts from job grade 14.

Employee survey – engagement rate (%)

	2018	2019	2020	2021	2022[1]
Overall participation rate	87	90	89	89	**67**
Individual engagement index	77	79	82	83	**86**
Organizational agility index	66	68	73	73	**NA[2]**
Goal alignment index	77	80	82	84	**NA[2]**

(1) The 2022 survey was a pulse survey on DEI and Engagement. Due to the very personal and sensitive nature of questions asked (self-declaration questions on identification with 'minorities'), there was no particular push from ST management for employees to answer. We consider that 67% is a very good response rate in this context.
(2) Not measured in 2022 (pulse survey only).

Internal mobility[1] (%)

	2018	2019	2020	2021	2022
Operator	–	4	3	2	**3**
Non-exempt	–	5	6	8	**10**
Exempt	25	20	27	23	**18**
Total	**–**	**8**	**9**	**7**	**8**

(1) Jobs filled internally.

Average number of training hours per year[1] I 404-1 I SDG 4.4

	2018	2019	2020	2021	2022
Operator	60	65	64	61	**70**
Female	56	62	55	59	**65**
Male	64	68	72	64	**75**
Non-exempt	40	46	35	34	**32**
Female	30	40	27	27	**27**
Male	42	47	37	36	**34**
Exempt	30	33	29	25	**30**
Female	32	37	31	27	**34**
Male	29	32	28	24	**29**
Total	**47**	**50**	**44**	**42**	**47**
Female	48	53	44	47	**52**
Male	46	47	44	40	**44**
Total number of employees trained[2]	**–**	**–**	**42,989**	**47,039**	**50,914**

(1) Based on the total headcount including turnover. Includes training on equipment and outside training.
(2) Based on the total headcount on December 31, excluding turnover.

Average number of training hours per age group

	2022
Under 30 years old	**61**
30–50 years old	**43**
Over 50 years old	**23**

Employees enrolled in ST supported external education programs (%)

	2018	2019	2020	2021	2022
Operator	0.6	1.1	1.0	0.8	**0.9**
Non-exempt	1.9	2.1	2.0	2.3	**2.8**
Exempt	1.9	3.6	2.2	1.5	**1.6**

Formal recognition and suggestion scheme

	2018	2019	2020	2021	2022
Number of people recognized[1]	18,879	20,837	23,892	25,909	**26,742**
Accepted suggestions which were implemented (%)	52%	30%	40%	51%	**51%**

(1) Can include more than one recognition per employee over the year.

Unplanned absenteeism (%)

	2018	2019	2020	2021	2022
Unplanned absenteeism	2.92	2.77	3.32	2.93	**3.35**
% by region					
Americas	0.24	0.03	0.01	0.01	**0.01**
Asia Pacific	2.82	2.83	2.62	2.78	**3.12**
Europe	2.84	2.89	3.68	3.01	**3.57**
Mediterranean	3.99	2.45	5.03	3.59	**3.89**
% by gender					
Female	3.54	3.19	3.87	3.61	**4.11**
Male	2.57	2.54	3.02	2.57	**2.96**

Collective bargaining | 2-30 |

	2018	2019	2020	2021	2022
Number of collective agreements signed in the year	55	30	62	55	**36**
People covered by collective bargaining agreements (%)	74%	78%	78%	79%	**79%**
People covered by representatives (%)	71%	71%	71%	72%	**74%**

Fair wages (%) SDG 10.3

	2018	2019	2020	2021	2022
Employees paid above 105% of the legal or conventional minimum wage	90.8	93.2	90.1	95.1	**92.9**

Working time and overtime hours

	2018	2019	2020	2021	2022
Employees with regular worktime less than 48 hours per week (%)	85%	85%	85%	85%	**85%**
Average weekly overtime (hours per employee)	5.2	4.3	5.4	5.8	**5.6**

Average weekly working time, including overtime, in selected countries[1] (hours)

		2018	2019	2020	2021	2022
China	ST standard working time	40	40	40	40	**40**
	Overtime	9.0	8.9	10.2	11.8	**13.5**
France	ST standard working time[2]	38.5	38.5	38.5	38.5	**38.5**
	Overtime	0.2	0.1	0.1	0.1	**0.2**
Italy	ST standard working time	40	40	40	40	**40**
	Overtime	0.4	0.3	0.2	0.3	**0.3**
Malaysia	ST standard working time	48	48	48	48	**48**
	Overtime	12.2	12.2	11.7	10.4	**11.7**
Malta	ST standard working time	40	40	40	40	**40**
	Overtime	8.1	6.9	7.3	7.8	**4.6**
Morocco	ST standard working time	44	44	44	44	**44**
	Overtime	0.6	1.7	0.4	0.4	**0.4**
Singapore	ST standard working time	44	44	44	44	**44**
	Overtime	8.3	4.7	6.9	11.3	**9.6**
The Philippines	ST standard working time	48	48	48	48	**48**
	Overtime	7.0	0.9	11.5	11.0	**10.1**

(1) For non-exempts and operators.

(2) French standard legal working time is 35 hours, but ST has a collective agreement for 38.5 hours.

ST sites subject to regular human rights SAQ & audits (RBA) | 409-1 |

Country	Major site[1]	% Workforce	Self-assessment	Audit
High risk				
China	Shenzhen	7.9%	✓	✓
Malaysia	Muar	9.1%	✓	✓
Singapore	Ang Mo Kio and Toa Payoh	9.5%	✓	✓
The Philippines	Calamba	5.5%	✓	✓
Medium risk				
Malta	Kirkop	3.6%	✓	✓ [3]
Morocco	Bouskoura	6.9%	✓	✓
Low risk				
France	Crolles	9.0%	✓	✓
	Grenoble[2]	4.1%	✓	✗
	Rousset	5.6%	✓	✓
	Tours	2.7%	✓	✓
	Rennes	0.2%	✓	✗
India	Greater Noida[2]	1.9%	✓	✗
Italy	Agrate	10.1%	✓	✓
	Castelletto[2]	2.2%	✓	✗
	Catania	9.6%	✓	✓ [3]
	Marcianise	0.5%	✓	✗
Sweden	Norrköping	0.1%	✓	✗
Percentage coverage of total workforce		89%	89%	79%
Number of sites subject to regular human rights SAQ and audits			17	11

(1) Site with >700 employees or manufacturing operations.
(2) Design centers.
(3) Audits conducted in 2021. All other audits were conducted in 2022.

RBA VAP[1] audit score (score out of 200)[2]

	2018	2019	2020	2021	2022
Number of initial audits	**6**	**3**	**5**	**6**	**5**
ST average score (initial audit)	164	176	186	155	**173**
Comparison ST vs electronic industry average	+35	+47	+45	+10	**+29**
Number of closure audits	**1**	**5**	**4**	**6**	**5**
ST average score (closure audit)	200	183	198	198	**200**
Comparison ST vs electronic industry average	+23	+13	+22	+20	**+19**

(1) VAP: Validated Assessment Program.
(2) Covers our 11 main manufacturing sites.

RBA audit results for ST operations | 409-1 | SDG 8.7

	2018	2019	2020	2021	2022
Number of audits	**7**	**8**	**9**	**12**	**10**
Total of priority non-conformances (NC)	0	0	0	0	**1[1]**
Total of major NC	21	12	11	37	**15**
Average major/priority NC/audit	**3.0**	**1.5**	**1.2**	**3.1**	**1.6**
Labor					
Working hours	4	1	3	6	**2**
Wages and benefits	1	0	0	2	**1**
Freely chosen employment	1	2	0	3	**2[1]**
Non-discrimination	0	1	0	2	**1**
Young workers	0	0	0	2	**0**
Total of major/priority NC	**6**	**4**	**3**	**15**	**6**
Average major/priority NC/audit	**0.9**	**0.5**	**0.3**	**1.3**	**0.6**
Ethics					
Intellectual property	0	0	0	1	**0**
No improper advantage	0	0	0	1	**0**
Total of major NC	**0**	**0**	**0**	**2**	**0**
Average major NC/audit	**0.0**	**0.0**	**0.0**	**0.2**	**0.0**
Health and Safety					
Emergency preparedness	3	2	2	5	**0**
Occupational injury and illness	3	1	0	1	**2**
Industrial hygiene	0	1	0	0	**0**
Machine safeguarding	0	0	1	0	**0**
Food, sanitation and housing	0	0	1	0	**2**
Occupational safety	3	1	2	2	**1**
Health and safety communication	0	0	0	1	**0**
Physically demanding work	0	0	0	0	**1**
Total of major NC	**9**	**5**	**6**	**9**	**6**
Average major NC/audit	**1.3**	**0.6**	**0.7**	**0.8**	**0.6**
Environment					
Hazardous substances	2	0	0	0	**2**
Energy consumption and GHG emissions	1	1	0	0	**0**
Total of major NC	**3**	**1**	**0**	**0**	**2**
Average major NC/audit	**0.4**	**0.1**	**0.0**	**0.0**	**0.2**
Management Systems					
Supplier responsibility	1	1	2	2	**0**
Training	1	0	0	2	**1**
Audits and assessments	1	1	0	1	**0**
Improvement objectives	0	0	0	1	**0**
Company commitment	0	0	0	2	**0**
Management accountability and responsibility	0	0	0	2	**0**
Legal and customer requirements	0	0	0	1	**1**
Total of major NC	**3**	**2**	**2**	**11**	**2**
Average major NC/audit	**0.4**	**0.3**	**0.2**	**0.9**	**0.2**

(1) One priority finding related to our on-site contractors' working hours. The other one is a major finding.

Employees with healthcare coverage provided by ST[1] (%)

SDG 3.8

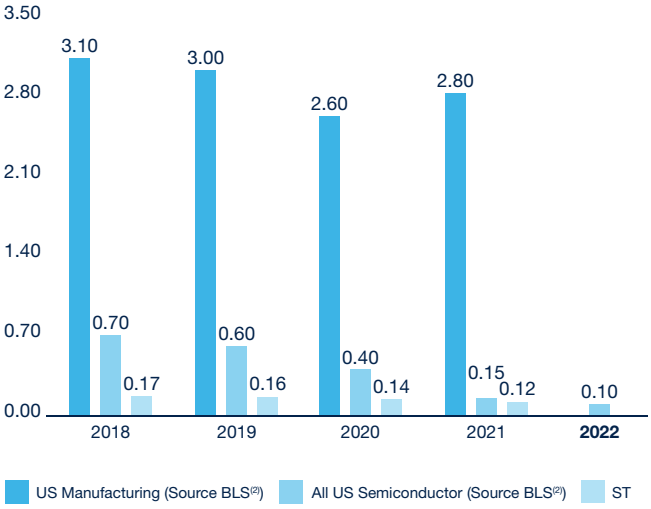
	2018	2019	2020	2021	2022
Work-related health issues	78	79	88	79	**81**
Personal health issues	89	89	98	98	**98**
Direct family members health issues	72	68	83	82	**80**

(1) In addition to national healthcare schemes.

EHS training

	2018	2019	2020	2021	2022
Average number of EHS training hours per employee	7.2	7.4	5.7	6.0	**7.4**

Recordable case rate benchmarks[1]



(1) Including injuries only. 2022 Benchmark data not available at time of publishing.
(2) Bureau of Labor Statistics (United States Department of Labor)

Recordable case rate[1] by gender and by region | 403-9 |

SDG 8.8

	2018	2019	2020	2021	2022
Gender					
Female	0.18	0.21	0.15	0.15	**0.13**
Male	0.16	0.13	0.13	0.10	**0.08**
Region					
Americas	0.00	0.00	0.00	0.00	**0.00**
Asia Pacific	0.11	0.11	0.12	0.10	**0.09**
Europe & Mediterranean	0.23	0.21	0.16	0.14	**0.14**

(1) Work-related injuries per 100 employees per year as defined by OSHA-US regulation.

Employee recordable case rate – including injuries and illnesses | 403-9 | 403-10 |

	2018	2019	2020	2021	2022
Employee recordable case rate[1]	0.19	0.17	0.15	0.13	**0.10**

(1) Per 100 employees per year as defined by OSHA-US regulation.

Contractor recordable case rate – including injuries and illnesses | 403-9 | 403-10 |

	2021	2022
Contractor recordable case rate[1]	0.28	**0.17**

(1) Per 100 contractors per year as defined by OSHA-US regulation.

Recordable case rate on-site industrial/domestic[1] | 403-9 |

	2018	2019	2020	2021	2022
Recordable case[2] industrial rate	0.13	0.09	0.07	0.06	**0.06**
Recordable case[2] domestic rate	0.04	0.07	0.07	0.06	**0.04**

(1) Industrial recordable cases are directly linked with industrial activity. Domestic recordable cases are on-site cases such as a fall or slip on stairs or struck by or against door/chair/building and structures etc.
(2) Work-related injuries per 100 employees per year as defined by OSHA-US regulation.

Recordable cases by type of event, accident or exposure (%) | 403-9 |

	2018	2019	2020	2021	2022
Fall or slip	30	45	47	49	**45**
Struck by or against	35	32	24	25	**27**
Overexertion	3	1	3	4	**2**
Caught in, under or between	10	7	8	4	**4**
Contact with chemicals	4	1	8	5	**6**
Bodily reaction from slip or motion	9	6	6	9	**12**
Others	9	8	4	4	**4**

Severity rate[1] by gender and by region

	2018	2019	2020	2021	2022
Gender					
Female	2.1	3.3	2.8	3.2[2]	**1.5**
Male	1.6	2.0	3.5[2]	2.2	**1.9**
Region					
Americas	0.0	0.0	0.0	0.0	**0.0**
Asia Pacific	0.4	0.7	1.7[2]	2.3	**0.7**
Europe & Mediterranean	3.1	4.1	4.7	2.7[2]	**2.7**

(1) Number of days lost per 100 employees per year as defined by OSHA-US regulation.
(2) Rate updated due to several prolongations in the following year after the closure of the previous reporting period.

Severity rate[1] – injuries and illnesses

	2020	2021	2022
Employee severity rate	4.0	2.6[2]	**2.0**
Contractor severity rate	–	7.2[3]	**4.3**
Total severity rate for employees and contractors	**–**	**3.2[3]**	**2.4**

(1) Number of days lost per 100 employees and contractors per year as defined by OSHA-US regulation.
(2) Rate updated due to sick leave prolongation after the closure of the previous reporting period.
(3) Data corrected due to error in reporting.

Occupational disease rate by gender and by region
I 403-10 I

	2018	2019	2020	2021	2022
Occupational disease rate[1,2]	0.02	0.01	0.01	0.01	**0.004**
Gender					
Female	0.06	0.03	0.01[3]	0.01	**0.006**
Male	0.00	0.00	0.01[3]	0.00	**0.003**
Region					
Americas	0.00	0.00	0.00	0.00	**0.000**
Asia Pacific	0.00	0.00	0.00	0.00	**0.000**
Europe & Mediterranean	0.04	0.02	0.01	0.016[4]	**0.008**

(1) Work-related illnesses per 100 employees per year as defined by OSHA-US regulation.
(2) The main types of occupational diseases are linked to musculoskeletal disorders.
(3) Data corrected due to error in reporting.
(4) Rate updated due to a late recognition from authorities, after the closure of the previous reporting period.

Occupational disease severity rate by gender and by region

	2018	2019	2020	2021	2022
Occupational disease severity rate[1]	1.92	0.93	0.72	0.08	**0.24**
Gender					
Female	5.50	2.70	0.13	0.15	**0.43**
Male	0.00	0.00	1.03[2]	0.05	**0.13**
Region					
Americas	0.00	0.00	0.00	0.00	**0.00**
Asia Pacific	0.00	0.00	0.00	0.00	**0.00**
Europe & Mediterranean	3.70	1.78	1.36[2]	0.16	**0.44**

(1) Number of days lost per 100 employees per year as defined by OSHA-US regulation.
(2) Rate updated due to several prolongations over 2021 after the closure of the previous reporting period.

Lost workday incidence rate – contractors I 403-9 I

	2018	2019	2020	2021	2022
Lost workdays per 100 contractors	5.2	4.1	5.3	7.2[1]	**4.3**

(1) Rate updated due to several prolongations not previously reported.

Lost workday incidence rate[1] – contractors by region
I 403-9 I

	2018	2019	2020	2021	2022
Americas	0.0	0.0	0.0	0.0	**0.0**
Asia Pacific	1.6	0.0	1.1	5.6	**0.9**
Europe & Mediterranean	7.6	6.9	8.2[2]	8.2[3]	**6.6**

(1) Number of days lost per 100 contractors per year as defined by OSHA-US regulation.
(2) Rate updated due to several prolongations over 2021 after the closure of the previous reporting period.
(3) Rate updated due to several prolongations not previously reported.

Lost workday – contractors by gender (%) I 403-9 I

	2018	2019	2020	2021	2022
Female	26	26	18	30[1]	**19**
Male	74	74	82	70[1]	**81**

(1) Rate updated due to several prolongations not previously reported.

Contractors lost workday case incidence rate (LWDC)
I 403-9 I

	2018	2019	2020	2021	2022
Lost workday cases per 100 contractors	0.29	0.26	0.24	0.27	**0.17**

Lost workday case incidence rate[1] – contractors by region
I 403-9 I

	2018	2019	2020	2021	2022
Americas	0.00	0.00	0.00	0.00	**0.00**
Asia Pacific	0.14	0.00	0.04	0.14	**0.07**
Europe & Mediterranean	0.40	0.44	0.39	0.35	**0.23**

(1) Number of cases with days lost per 100 contractors per year as defined by OSHA-US regulation.

Lost workday cases – contractors by gender (%) I 403-9 I

	2018	2019	2020	2021	2022
Female	14	30	18	20	**17**
Male	86	70	82	80	**83**

Injuries costs and savings (US$m)

	2018	2019	2020	2021	2022
Injuries costs	1.4	1.9	2.5[2]	2.2	**1.6**
Costs if no action	9.8	10.1	10.5	11.7	**12.0**
Savings[1]	8.4	8.2	7.4[2]	9.5	**10.4**

(1) Around US$116m savings in 19 years.
(2) Rate updated due to several prolongations over 2021 after the closure of the previous reporting period.

Fines and total number of non-monetary sanctions in 2022 I 2-27 I

Toa Payoh (Singapore) fined $SGP1,000 for leaving unattended the ignition key of a forklift.

Number of fatalities I 403-9 I 403-10 I

	2018	2019	2020	2021	2022
Employees	0	0	0	0	**0**
Subcontractors	0	0	0	0	**1[1]**
Total	**0**	**0**	**0**	**0**	**1[1]**

(1) One subcontractor victim of a fatal accident trying to move a Mobile Elevated Working Platform, without authorization (India).

Protecting the environment

62%
renewable electricity

42%
of water recycled and reused

95%
of waste reused, recovered, or sent for recycling

Photovoltaic park, ST Bouskoura, Morocco

Our approach to the environment

PROTECTING THE ENVIRONMENT

We are committed to managing our business operations in an environmentally responsible way.

1993
first environmental policy

0.70
eco-footprint score in 2022

15
sites assessed for biodiversity

ST Agrate, Italy

At ST, we provide semiconductor solutions that play an important role in helping to solve environmental and social challenges. At the same time, our operations require natural resources and can have a negative impact on the environment if not managed properly. For nearly 30 years, protecting the planet has been a priority. We have worked consistently to minimize our overall environmental footprint and are committed to reaching carbon neutrality by 2027.

Driving environmental efficiency

Strong governance

We recognize the importance of conducting business in a responsible manner. In 1993, we established our first global environmental policy (the current version is available on www.st.com). Our sustainability charter (www.st.com/sustainabilitycharter) supports this policy by outlining our commitments and goals for 2025 and 2027.

Our approach to the environment is led by executive management and incorporated into our overall Company strategy. The corporate environmental team is responsible for developing programs and procedures. These are then implemented at operational level by local sustainability committees who develop a roadmap according to the needs of their respective sites.

At each manufacturing site, the Environmental, Health and Safety (EHS) steering committee is responsible for implementing the environmental policy. It is composed of members from facilities, production, human resources, and production support. The committee meets quarterly to review and update various topics, such as the site environmental performance or the status of compliance with environmental standards and requirements. Outcomes are shared with the site management for review, and appropriate actions implemented where necessary.

Robust management system

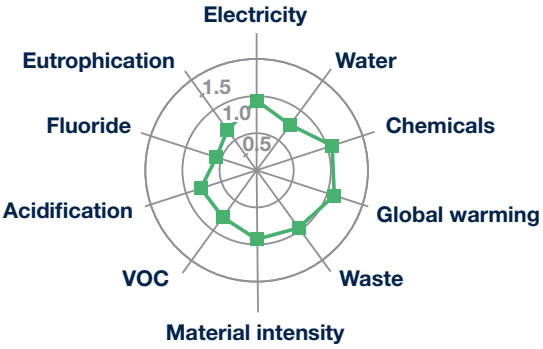
Our environmental management is aligned with recognized international standards, such as ISO14001, ISO50001, ISO14064, and EMAS[1]. Our performance and management systems are evaluated annually through third-party surveillance audits, and our certifications are renewed every 3 years. In 2022, all our sites maintained their certifications and our Kirkop (Malta) and Rennes (France) sites joined the 11 ST sites already ISO50001 certified.

To support our culture of continuous improvement, we also conduct internal audits every 3 years. In 2022, we conducted internal audits at seven sites.

In addition, we have a three-year program to conduct third-party EHS legal compliance audits. These assess the compliance status of our sites and limit risks related to our license to operate. The program covers 38 sites, including all our manufacturing sites, all sites with more than 150 employees and some smaller sites and warehouses. In 2022, we conducted nine EHS legal compliance audits.

Monitoring environmental performance

We evaluate our overall environmental performance by monitoring multiple indicators, such as resource consumption, waste, and air emissions.



All environmental data within ST is collected and reported regularly (monthly, quarterly, and yearly) on our central environmental database. Tracking the progress of each indicator allows sites to constantly adjust and improve their performance. We share the results and best practices with all teams during quarterly environment steering committee meetings.

Since 2001, we have used our 'eco-footprint' radar, an internal tool to analyze data on the inputs and outputs of our manufacturing operations. The smaller the footprint, the better the performance, with a score of 1.0 or below considered good. It allows us to compare the environmental impact of each ST manufacturing site, as well as our overall progress. We analyze the results to identify potential improvements and define the priorities we need to address. In 2022, our eco-footprint score was 0.70, better than our target of 0.75.

I 3-3 I

[1] EMAS: Eco-Management and Audit Scheme.

FOCUS

BIODIVERSITY

Declining biodiversity is a growing concern globally. Natural ecosystems are increasingly becoming disrupted, which poses direct threats to humanity. This loss can be attributed to several different factors, including industrial activity, making it critical for organizations to support global biodiversity objectives and the UN Sustainable Development Goals 14 (conserving and sustainably using the oceans, seas, and marine resources) and 15 (conserving life on land).

At ST, we maintain a vigilant and proactive approach to protecting the environment and we recognize the need for a comprehensive biodiversity strategy going forward. To date, several initiatives have been carried out to protect biodiversity of the areas around our sites, such as beehives, low mowing or insect hotels.

In 2022, we launched a survey across 22 of our sites to help us understand our impacts and assess actions already taken. Data was gathered on past studies and initiatives as well as on future projects of the respective sites. This enabled us to identify key areas for improvement.

In addition, we commissioned a specialist study from an external partner to provide an assessment on the biodiversity and ecosystems in the areas close to our sites and operations. Fifteen sites were assessed from our front-end and back-end activities, along with three R&D and design centers. Both qualitative and quantitative evaluations were used to define the environmental context of each site.

Our approach is centered around three key pillars:

- minimizing our impact
- protecting and restoring
- engaging local stakeholders

We defined a biodiversity index based on 10 criteria: governance and strategy; risks and opportunities; water; air; soil; naturality; forest; flora; fauna; and external partnerships. These are scored and prioritized depending on the local context, site maturity level and actions already in place. This will allow us to define priorities to address and monitor our overall progress year on year.

Through our continued efforts, we aim to gain a full understanding of our biodiversity impacts, which will enable us to establish relevant indicators, finalize our corporate biodiversity policy and implement robust environmental management systems. In parallel, our sites continue to implement local initiatives to protect nearby habitats.

Energy and climate change

PROTECTING THE ENVIRONMENT

We take action to mitigate the impact of our activities on climate change.

62%
renewable electricity used

-40%
scope 1 & 2 emissions (since 2018)

2027
carbon neutrality commitment

New photovoltaic carpark, ST Grenoble, France

Climate change is one of the biggest threats facing society. At ST, we recognize we have a responsibility to help address this global challenge.

In 2020, we announced our commitment to becoming carbon neutral by 2027. Our carbon neutrality program includes:

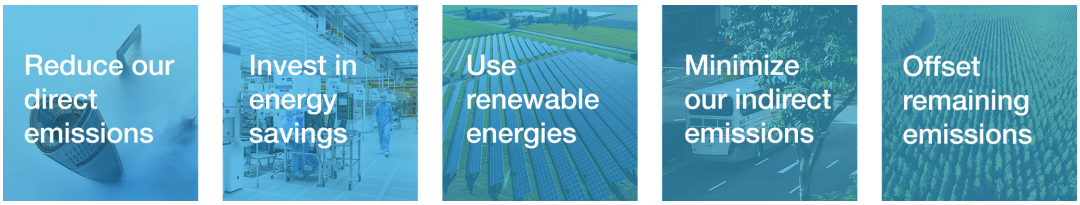
- a comprehensive strategy covering the reduction of direct and indirect emissions, including product transportation, business travel, and employee commuting
- the sourcing of 100% renewable energy by 2027
- an intermediate milestone, to be achieved by 2025, with full compliance with the 1.5°C scenario defined in the Paris Agreement adopted at COP21, endorsed by the Science Based Targets Initiative (SBTi)

CARBON NEUTRAL

by 2027

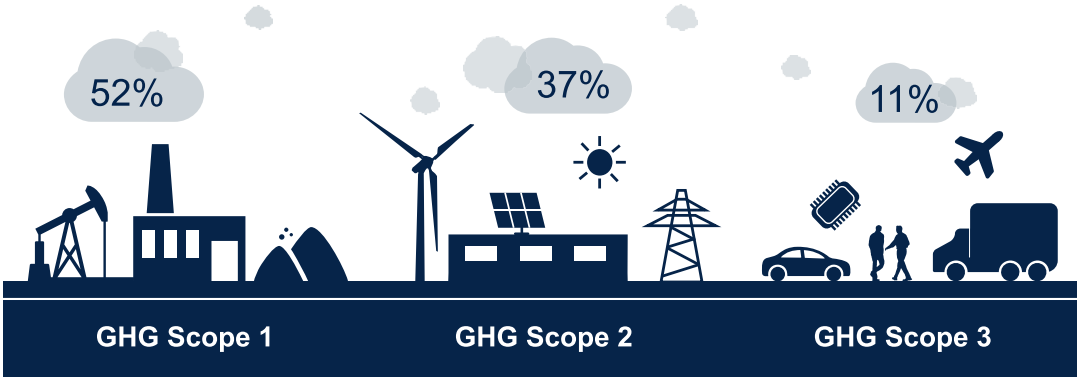
Moving towards carbon neutrality

Our carbon neutrality program comprises five main workstreams. I 3-3 I



The programs in place in all our manufacturing sites address our direct and indirect emissions in accordance with scopes 1, 2 and partly 3 of the GHG Protocol. In 2022, we decreased our CO_2 equivalent emissions by 59% (per unit of production) compared to 2016.

Breakdown of GHG emissions I 305-1 I 305-2 I 305-3 I



Scopes 1, 2, 3 according to Greenhouse Gas (GHG) Protocol.

Reducing our direct emissions

Our direct emissions, as defined by scope 1 of the Greenhouse Gas (GHG) Protocol, represent more than 50% of our total GHG emissions. In 2022, our direct emissions (measured in tons CO_2 equivalent) increased by 5% in absolute terms, but we reduced our direct emissions per unit of production by 1% compared to 2021. The increase in direct emissions was mainly due to a rise in production volumes, as well as delays in the delivery and installation of abatement systems.

The use of perfluorinated compounds (PFCs) in the manufacture of semiconductors accounts for a significant proportion of our direct air emissions. It is therefore a central part of our environmental strategy to reduce their use and ensure they are treated appropriately before being released into the atmosphere. As part of our carbon neutrality journey, all our sites have invested in initiatives to reduce their direct emissions. Our Ang Mo Kio site (Singapore), one of the highest contributors to our total GHG emissions, installed 12 additional abatement systems to reduce PFCs. This resulted in a 4.7% reduction in PFC emissions per unit of production compared to 2021. Our Crolles (France) and Agrate (Italy) sites also installed additional abatement systems during 2022.

Investing in energy saving

In 2022, we decreased our energy consumption (per unit of production) by 19.8% compared to 2016, in line with our 2025 goal of a 20% reduction. However, there was an increase in our absolute energy consumption (+5%), due to a significant increase in production. Overall, this demonstrates the positive impact and efficiency of our actions.

All our manufacturing sites develop initiatives to optimize their energy consumption. Environment, health and safety (EHS) teams at our major sites worked on 45 projects during 2022, saving an additional 24GWh of energy. Since 2018, we have invested around US$42 million in energy-saving programs which have saved approximatively 112GWh of energy per year. This is in line with our objective to save at least 150GWh per year by 2027. I 302-4 I

Energy-saving projects we have implemented include the upgrade of point-of-use chillers and dry pumps at our Ang Mo Kio site (Singapore), saving more than 3.7GWh/year, and the installation of new free cooling systems in our Catania site (Italy), with an estimated saving of 4GWh/year.

Energy-saving initiatives are not exclusive to our manufacturing sites. To maximize our impact, we have engaged the entire organization in our carbon neutrality journey.

Our IT organization plays an important role by improving the energy efficiency of our service delivery. Allowing a higher temperature in data centers reduces the energy required for cooling. In addition, by using virtual server technology, we can reduce the number of physical servers – and therefore power consumption – required for the same amount of work. We estimate these actions save approximately 10.2GWh/year.

In France and Italy, we have created specific committees dedicated to energy management.

FOCUS

ENERGY EFFICIENCY

Reducing energy consumption is part of our goal to be a carbon neutral company by 2027. As part of our response to the energy crisis of 2022, we accelerated our energy-saving measures across the Company. We established energy crisis teams in France and Italy to drive short- and medium-term energy reduction programs at all sites. The committees are responsible for implementing the programs and monitoring performance to ensure manufacturing activities can continue in case of power rationing or cuts during winter.

Energy efficiency activities at each site are based around three key pillars.

- Cleanrooms: current programs are being stepped up wherever possible.
- Office spaces: temperature control; switching off lights, office equipment, drinks dispensers, and neon signs in the evening and at weekends; accelerated deployment of LED lighting. IT measures include temperature optimization of computer rooms and the use of energy-efficient equipment.
- Continuity plans in collaboration with national and local stakeholders, notably utility companies, electricity grid management, and public authorities.

All these actions help to mitigate the impacts of the energy crisis and accelerate our energy-saving programs, in line with our carbon neutrality objectives.

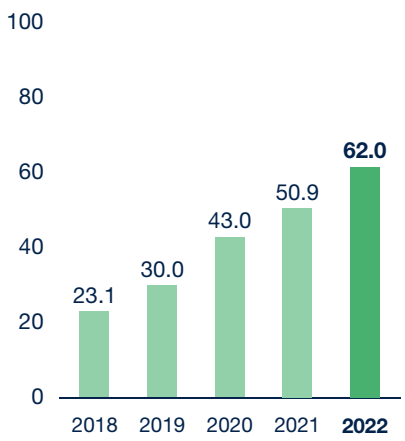
Using renewable energies

Almost 92% of the energy we use comes from electricity. Renewable sources provided 62% of the electricity we purchased in 2022, compared to 51% in 2021. Green sourcing helped us reduce our emissions by the equivalent of 464,624 metric tons of CO_2, corresponding to 464,624 individual one way flights from Milan to New York. This is mainly due to purchasing more green electricity certificates.

62%

renewable electricity

Renewable electricity[1] (%) | 302-1 |



[1] Covers our 11 main manufacturing sites, plus Rennes, Castelletto and Grenoble.

As part of the move towards more renewable energy sourcing, our Bouskoura site (Morocco) benefited from the electricity produced by 12 wind turbines installed in the framework of a power purchase agreement (PPA). In 2022, these turbines supplied 56% of the power used by the site, contributing to a reduction in CO_2 emissions of about 31,500 metric tons.

The site also extended its 4,000m^2 photovoltaic carport. An additional 3,100m^2 of solar panels will supply approximately 0.9GWh of electricity from 2023. This will complement the 1GWh already supplied annually, which partially powers the site's cleanroom.

Similarly, solar power installations at our sites in Catania (Italy) and Grenoble (France) produce 2GWh of green electricity annually. Our Grenoble site also installed a new photovoltaic carport during the year. The 10,900m^2 of solar panels will produce 2.7GWh of electricity annually, from 2023.

Solar and wind PPAs will play a major role in our transition to 100% renewable electricity by 2027. Cross-functional teams have been working throughout the year on an ST energy procurement strategy. Our ambition is to identify new-build project opportunities which meet 'additionality' criteria. This means selecting projects that bring new capacity into the grids in locations where we operate. To achieve this, we will initiate strategic and long-term partnerships.

Marie Thorax
Energy Procurement Manager, EMEA

As part of our transition towards renewable energy, I am expanding our EMEA green energy supply with long-term procurement contracts. These will support the development of new renewable energy assets, such as wind farms and solar parks, and inject additional renewable electricity into the grid. In terms of carbon offsetting, we are building a strategy that focuses on promoting high-quality projects with robust methodologies and reliable funding. It is an exciting journey to be part of ST's contribution to global efforts to combat climate change."

Minimizing our indirect emissions from transportation

From 15 material topics defined in scope 3 of the GHG Protocol, we have selected three areas to report where we can maximize our impact:

- employee commuting
- business travel
- goods transportation

The COVID-19 pandemic affected our scope 3 emissions for 2 years, making it difficult to report linear progression. In 2022, we noted a 22% increase compared to 2021. Emissions due to goods transportation, which represent 51% of our scope 3 emissions, increased by 19% during 2022. This was partly due to growth in our business and higher production volumes. The post-pandemic return to business travel and employee commuting also contributed to this increase.

However, compared with pre-pandemic figures (2019), in 2022 we saw a decrease of 50% in emissions related to business travel and 13% in emissions related to employee commuting, despite a headcount increase.

Our sites reinforced sustainable employee commuting concepts, promoting green transportation and car sharing. The deployment of flexible working arrangements, such as working from home, also helps to minimize our emissions. I 305-3 I

Offset remaining emissions

Our current environmental programs and data do not include carbon offsetting projects. Developing carbon offset programs is the final step of our carbon neutrality program.

In 2022, we created our vision for a balanced portfolio of offset projects, based on a long-term commitment to local projects and innovative solutions. Our criteria will focus on the quality of the carbon credit certificates generated. The objective is to combine nature-based solutions with technology solutions, for both carbon removal and avoidance. We will select and develop these projects in the coming years in collaboration with our stakeholders, according to local opportunities and needs.

Addressing climate-related risks

Since 2020, when we publicly declared our support for the Taskforce on Climate-related Disclosure (TCFD), we have been working towards implementing TCFD recommendations (see also **Risk management** and **TCFD index**).

We adopt a 'double materiality' perspective when considering climate-related risks:

- impact of our activities on the environment and people
- impact of climate change on our activities

In 2022, our environmental and resilience teams continued to work closely together to address physical risks resulting from climate change that are either chronic (induced by longer-term shifts in climate patterns) or acute (event-driven) in a way that is consistent with the TCFD and the EU Green Deal classification. This is illustrated in the table below.

Addressing natural hazards risks

	Temperature-related	Wind-related	Water-related	Solid mass-related
Chronic	Changing temperature (air, freshwater, marine water)	Changing wind patterns	Changing precipitation patterns and types (rain, hail, snow/ice)	Coastal erosion
	Heat stress		Precipitation or hydrological variability	Soil degradation
	Temperature variability		Ocean acidification	Soil erosion
	Permafrost thawing		Saline intrusion	Solifluction
			Sea level rise	
			Water stress	
Acute	Heat wave	Cyclone, hurricane, typhoon	Drought	Avalanche
	Cold wave/frost	Storm (including blizzards, dust and sandstorms), including medicanes	Heavy precipitation (rain, hail, snow/ice)	Landslide (including rock fall)
	Wildfire	Tornado	Flood (coastal, fluvial, pluvial, groundwater)	Subsidence
			Glacial lake	

Covered by climate change study	Covered by specific site studies when required
Covered by water scarcity study	Non-applicable to ST footprint

Source: EU commission

In 2021, we commissioned a science-based study from AXA Climate to assess current and future climate risks on our 140 most critical locations (ST and partner sites in 23 countries). To guide our adaptation efforts, the analysis was based on two climate change scenarios defined by the United Nations Intergovernmental Panel on Climate Change (IPCC):

- RCP4.5 (+2.4°C by 2100 vs pre-industrial levels)
- RCP8.5 (+4.3°C by 2100 vs pre-industrial levels)

For each scenario and location, climate projections for 2030 and 2050 show the likely impacts across a range of indicators, such as number of days of heatwaves, high winds, and heavy rain. This allows us to calculate a combined climate-related 'peril score' for each location.

Also in 2021, we commissioned a second study from Quantis, an environmental consultancy, focusing on the characteristics and impact of water scarcity and our carbon footprint (see **Water**).

In addition to these global analyses, we also carry out site-specific studies on natural hazards, according to local conditions.

Overall, the purpose of these various climate-related analyses is to inform our site-level business interruption risk assessments and business impact analyses, as well as our site resilience index. Ultimately, they feed into our regularly updated improvement, mitigation, and adaptation plans, helping us address environmental and resilience issues in the medium to long term.

We are proactively addressing the transition to a lower-carbon economy. In this context, we are in the process of further identifying and assessing policy, legal, technology, and market transition risks, across the short, medium and long terms, as per TCFD provisions. At the same time, we are actively investing in developing and launching new products to help our customers implement new energy-saving applications, transforming risk into opportunity (see **Sustainable technology** and **Innovation**).

Progress towards SBTi validated targets

As part of our carbon neutrality program, ST joined SBTi at the end of 2020. This initiative provides a clearly defined pathway for companies to reduce their GHG emissions. We were the first semiconductor company with approved targets to limit warming to no more than 1.5°C.

Our SBTi approved targets related to 1.5°C compliance are intermediate targets within our carbon neutrality commitment:

- 50% reduction of direct (scope 1) and indirect (scope 2) emissions by 2025 compared to 2018
- 80% renewable electricity sourcing by 2025

By the end of 2022, we were on track towards these targets, achieving 40% and 62% respectively.

SCIENCE BASED TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

BUSINESS AMBITION FOR 1.5°C

Progress versus SBTi targets (KTons)[1,2] | 305-1 | 305-2 | 305-5 |

	2018	2019	2020	2021	2022
Direct emissions Scope 1 (KTons)	692	560	489	484	**507**
Indirect emissions (purchased electricity) Scope 2 market-based[3] (KTons)	772	707	567	474	**360**
Total emissions Scopes 1, 2	**1,464**	**1,266**	**1,055**	**958**	**867**
Renewable electricity/purchased electricity (%)	23.1%	30.0%	43.0%	50.9%	**62.0%**

(1) The sums may not add up due to rounding of the figures.
(2) Covers our 11 main manufacturing sites, plus Rennes, Castelletto and Grenoble.
(3) Market-based method calculation according to GHG Protocol standard.

Contributing to the Sustainable Development Goals

Our commitments and programs as described above contribute to:

SDG target 7.3 – By 2030, double the global rate of improvement in energy efficiency.

SDG target 8.4 – Improve progressively, through 2030, global resource efficiency in consumption and production.

SDG target 13.1 – Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

2027 sustainability goal	Status	Comments
SG9: Be carbon neutral by 2027 in all direct and indirect emissions from scope 1 and 2, and focusing on product transportation, business travel and employee commuting emissions for scope 3.		972KT net CO_2 eq emissions
SG10: Adopt 100% renewable energy sources by 2027 through energy procurement and green energy installations.		57% of total energy (62% of total electricity)
SG11: Implement programs to reduce energy consumption by at least 150GWh per year by 2027.		24GWh saved in 2022 112GWh saved since 2018

2025 sustainability goal	Status	Comments
SG12: Reduce energy consumption per wafer by 20% in 2025 vs 2016.	✔	-20%
80% of renewable electricity by 2025.		62%
-50% absolute Scope 1 and Scope 2 GHG emissions by 2025 (2018 baseline).		-40%

Water

PROTECTING THE ENVIRONMENT

We are committed to tackling the challenges of water scarcity and wastewater treatment across our operations.

A
list for CDP water security

42%
of water recycled and reused

-12%
water consumption since 2016

Deionizer system, ST Rousset, France

Water is a limited natural resource that is essential to people, life, and business. Population growth and climate change make it increasingly important to protect this shared resource.

We implement solutions to reduce water extraction and consumption and work closely with local stakeholders, institutions and political representatives in the communities where we operate.

Tackling the numerous challenges of water supply has been part of our strategy since 1994 and becomes more important year after year.

Our comprehensive management approach includes water stress assessments, conservation programs, water efficiency, and wastewater treatment. I 3-3 I 303-1 I

Strengthening our efforts

We recognize our responsibility for water-related challenges wherever we operate. In 2022, we partnered with a consulting company to update our water policy and strategy. We conducted a series of internal workshops with teams throughout the organization to set our water ambition, targets and goals. We also consulted external stakeholders to collect and review feedback on our water strategy.

Bluerisk

Paul Reig
Founder, Bluerisk

Bluerisk partnered with ST to enhance its water strategy in response to emerging water challenges for semiconductor producers. We worked with practitioners across ST, along with external stakeholders, to develop an overall ambition and set targets to help ST accelerate innovative solutions to protect water resources and deliver long-term value."

It is our ambition to increase the water resilience of our sites and implement mitigation strategies to minimize risks related to water availability and biodiversity. This process includes reviewing our energy supply to select the most water-efficient energy sources.

We aim to minimize any impact from our operations on local communities through careful management and committed partnerships; and create value by providing responsible products and technologies. Our long-term goal is to engage our external stakeholders to implement solutions that protect water resources and deliver long-term societal value, especially in water-stressed areas.

Recognized by CDP

We have been participating in CDP's annual water security survey since 2004. Preparing our submission helps us identify areas for improvement and provides a platform for our customers to assess our water performance. In 2022, ST was officially recognized by CDP as a global leader in corporate transparency and action on water security. We were one of only 107 companies to make the Water Security A List out of nearly 15,000 organizations. This reflects our efforts across all our operations to reduce our water footprint and other related risks.

CDP
DISCLOSURE INSIGHT ACTION
A LIST
2022
WATER

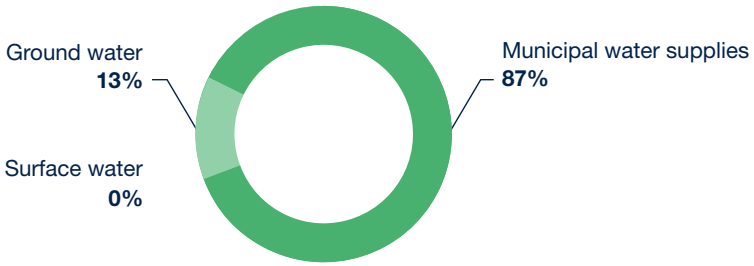
Assessing impact and water-related risks

Water withdrawal

A reliable water supply is essential to the semiconductor manufacturing process. All ST sites manage their water-related risks according to their needs and water availability. Each site monitors the volume of water it uses and complies with local permits. Only two of our manufacturing sites use groundwater for their operations.

In 2022, 13% of the water used throughout our operations came from groundwater sources, and 87% from municipal water supplies.

Water withdrawal by source in 2022 (%)[1] I 303-3 I SDG 6.4



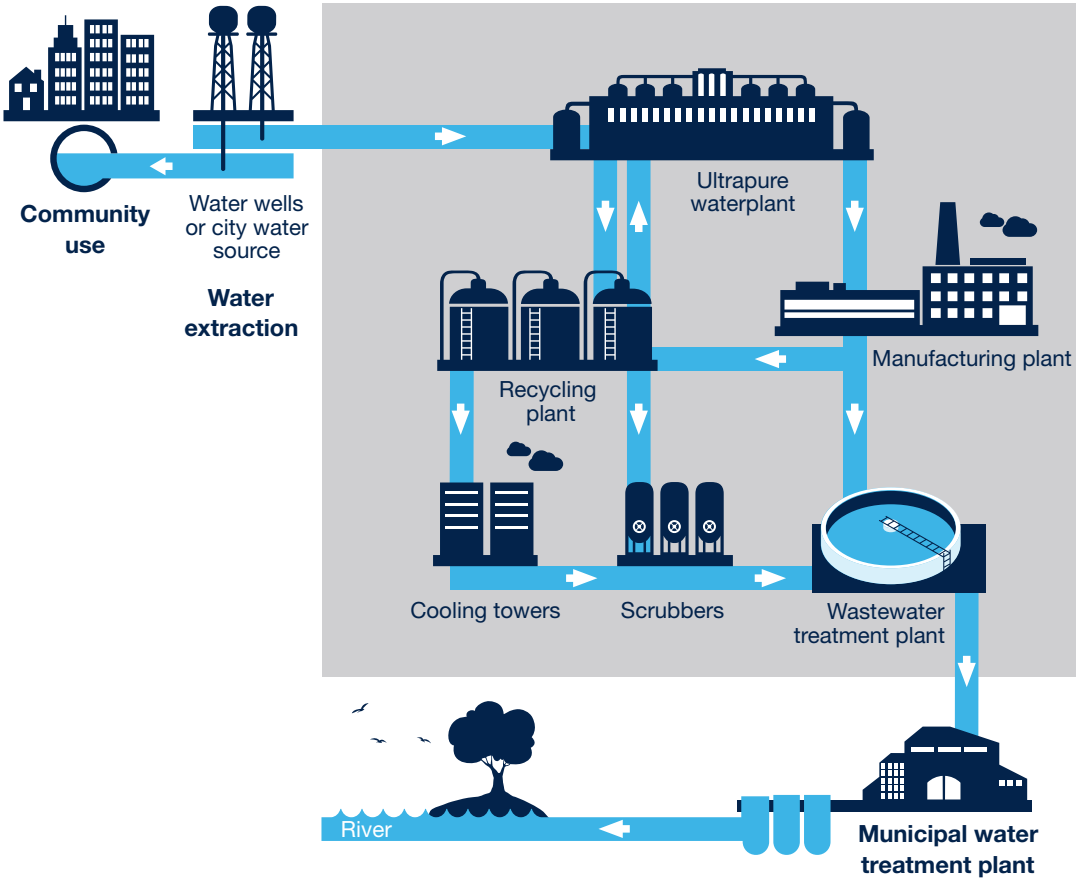
[1] All water withdrawal is freshwater.

Addressing water-related risks

In 2021, we conducted a water assessment to evaluate our global water footprint. The aim was to identify areas of high water stress and the water-related risks of our operations, as well as assessing our impact on local communities. Using the lifecycle assessment approach, we evaluated our direct and indirect impacts. We also identified that most of our manufacturing sites are at medium risk for operational and external risks, water quality and scarcity, using the Water Risk Filter 5.0 methodology.

In 2022, we went one step further, asking our manufacturing sites to assess relevant risks and formalize water saving action plans. As a result, all sites were successful in defining remedial actions. These action plans are reviewed quarterly at both manufacturing and corporate level. Results are part of the sustainability scorecard that is shared with the Corporate Executive Committee quarterly.

Typical ST water cycle



Reducing our water usage

Save water

Manufacturing semiconductors requires a large volume of water. We strive to continuously improve water efficiency across our operations. In 2022, we reduced our water consumption per unit of production by 12% compared to 2016. Our 2025 goal is to improve our water efficiency by 20% vs 2016. To meet this target, we are working towards implementing our enhanced water strategy and action plans.

12%

reduction in water consumption since 2016

Water usage varies from site to site according to local conditions, such as raw water quality, treatment technologies and local strategies. Usage is split across four main areas:

- ultrapure water production
- cooling
- heating, ventilation, and air conditioning
- drinking water

Identifying and measuring water usage is the first step in assessing areas for improvement, such as technical upgrades or optimizing processes and tools. Our manufacturing sites are encouraged to identify and deploy a range of different initiatives to save water.

FOCUS

ADVANCING TOWARDS A SUSTAINABLE WATER FUTURE

Process optimization in the semiconductor industry has led to an increase in water consumption across back-end operations. In 2022, our Calamba site (the Philippines), conducted a study to address water mass balance, reduce its water footprint and increase water recycling rates. The study was initiated due to the site's high water consumption levels. Detailed data collection and analysis identified a number of issues to be resolved, along with remedial solutions. As a result, a 3-year budget has been allocated to focus on reducing raw water consumption and increasing the site's recycling rate from 30% to 60%.

In line with this best practice, all our back-end sites have accelerated their water efficiency targets to align with Company policy. In 2023, they will work with a strategic partner to define a water roadmap, with the goal of reaching an overall water recycling rate of 60% by 2026.

In collaboration with a supplier, our Catania site (Italy) reduced its water consumption of 100,000m^3/year by improving the management of the water inlet flow and reducing wastage. Combined with other improvements, the site decreased its water consumption by 2% in absolute terms and by 7% per unit of production compared to 2021.

Reuse and recycle

One of our main approaches to overall water conservation is to reuse and recycle. However, as the semiconductor production process relies on ultrapure water, it is not always possible to reuse processed water. Although water can be treated and recycled into ultrapure water, it is more often reused to cover facility needs, such as cooling towers, scrubbers, and thermal processing units.

In 2022, our water recycling rate reached 42%, a 2-point increase compared to 2021. Although this demonstrates progress, we know that further efforts are needed to reach our 2025 goal of 50%. We have identified the sites where we need to accelerate actions to achieve our goal.

42%

of water recycled and reused

Our Kirkop site (Malta) focused on improving the water recycling rate in 2022 through better segregation of wastewater, and optimization of the reverse osmosis process. Despite challenges due to the hot climate and the introduction of new chemical processes, the engineering team managed to raise the recycling rate to 45% in 2022 from 44% in 2021.

Similarly, in Morocco, where water is a particularly scarce resource, our Bouskoura site implemented several action plans to reduce its water consumption and improve the water recycling rate. In 2022, despite higher water demand due to an increase in production, the site succeeded in maintaining a recycling rate of 55%. This was largely due to the increased capacity of the wastewater treatment plant.

Treating wastewater

Wastewater from our manufacturing processes contains pollutants such as heavy metals and toxic solvents. It is our responsibility to ensure all used water is appropriately treated before discharging it back into the natural environment.

To mitigate any risk of pollution, our wastewater is treated on site or in municipal treatment plants before being discharged. Our manufacturing sites are continually improving their treatment of wastewater and the quality of water discharge, which is carefully controlled and monitored online.

Contributing to the Sustainable Development Goals

Our commitments and programs as described above contribute to:

SDG target 6.4 – Substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity.

SDG target 8.4 – Improve progressively, through 2030, global resource efficiency in consumption and production.

2025 sustainability goal	Status	Comments
SG13: Improve our water efficiency by 20% by 2025 vs 2016.		-12%

Annual sustainability goal	Status	Comments
SG14: Recycle at least 50% of the water used each year.	✕	42%

Waste

PROTECTING THE ENVIRONMENT

We strive for zero waste, by minimizing resource consumption, recycling and implementing circular economy programs.

95%
of waste reused, recovered, recycled

43%
reduction in waste sent to landfill

Zero
waste concept prioritized

Sludge, ST Shenzhen, China

Managing our waste

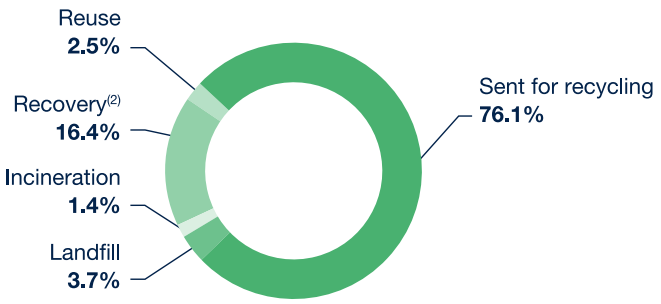
Generating waste is an inevitable part of our operations. Acknowledging this, we have developed a comprehensive waste management strategy to limit our negative impacts. We focus on the classification, separation and safe disposal of waste using an approach driven by local regulations and Company policy. Our priority is to reduce, reuse and recycle and we consider landfill and incineration to be a last resort. I 3-3 I

Improving our performance

In 2022, 95% of the waste generated by our operations was either reused, recovered, or sent for recycling. This achievement allowed us to reach our 2025 target early. We also reduced the quantity of waste sent to landfill from 6.8% in 2021 to 3.7% in 2022. Although this was an improvement, we still fell short of our target of 3%.

95%
of waste reused, recovered, or sent for recycling

Waste split in 2022[1] (%) | 306-3 |



[1] The sums may not add up to 100% due to rounding of the figures.[2] Waste burnt with recovery of energy (combustion).

Reducing landfill waste is an ongoing priority. Following the UL zero waste certification of our Shenzhen site (China) in 2021, our Calamba site (the Philippines) successfully passed this third-party certification for landfill diversion in 2022. The UL zero waste validation program focuses on monitoring and measuring material flows through external audits and document validation, with the aim of eliminating landfill disposal. The overall goal was not only waste reduction, but also waste recovery and proper segregation. To facilitate this, the site implemented a number of new initiatives, including 'no disposable Wednesdays', color-coded bins, WEEE recycling, and a solid material waste recovery shed (see quote).

Robert Portento
Environment specialist, ST Calamba (the Philippines)

We started promoting the concept of zero waste in 2021. We implemented a range of waste reduction and recovery programs and encouraged employees to adopt a zero-waste lifestyle, while building management awareness. After promoting these new initiatives, we managed to reuse and recycle 98% of our waste in 2022. At Calamba the journey does not end here, our dedication, passion and collective responsibility towards this cause will continue."

Striving for less

We believe the best waste is no waste. We apply this approach at all our manufacturing sites to minimize unnecessary resource consumption and waste generation.

Prioritizing zero waste

In 2022, our Ang Mo Kio site (Singapore) reviewed its waste management strategy. The process started with waste identification to get a full understanding of the types of waste generated by each department. It also focused on establishing the factors that lead to incorrect waste disposal.

Action points were defined to increase awareness and competency at the site. These included consolidating waste types into a formal library, developing a weblink search feature and developing training to implement the actions identified. Employee outreach initiatives were rolled out to reduce plastic, increase recycling and encourage community mindfulness in relation to reducing our carbon footprint.

Resin is used at our back-end manufacturing sites to encapsulate components. In 2022, our Muar site (Malaysia) implemented a resin recycling system known as co-processing to eliminate disposal of the material to landfill. Co-processing involves using waste materials with energy content as an alternative to fossil fuels. Through this process, the spent resin can be used to heat kilns in the cement industry, reducing waste and, in turn, the carbon footprint of the industry.

The advantages of using cement kilns for waste management include:

- complete burnout of waste due to high temperatures and long resident time
- destruction of the organic component in the waste material due to the high oxygen component of the kiln
- no secondary waste generated during co-processing as the ashes are incorporated into the cement mixture
- no adverse effect on emissions

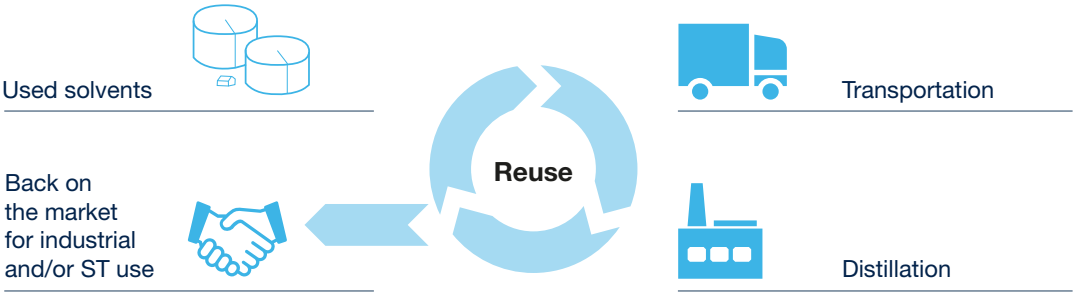
Through co-processing, our Muar site has reduced the amount of waste sent to landfill from 30% to 2%.

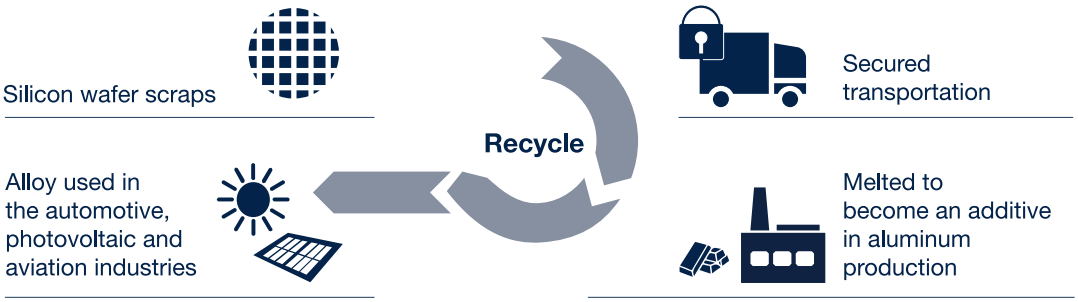
In 2022, our Tours site (France) carried out a study with an external partner to establish a more efficient method for nickel recycling. As a result of the study, it identified a process to extract nickel from a liquid solution using evaporative crystallization. This new process will be implemented in 2023, saving 120 tons of waste annually. The site is also researching a separate system for recycling nickel sludge.

Promoting a circular economy

Moving towards a circular economy benefits the environment, people, and our company. For several years, we have been implementing solutions to create value from the residual waste generated from our activities.

- Fluoride sludge is transformed into pellets for the metallurgy industry.
- Sulfuric acids are used for recycling batteries.
- Deflashing waste powder is sent for precious metal recovery.
- Palladium is recovered for reuse in the automotive industry.
- Electronic waste is dismantled; some parts are reused, and precious metals are recovered.
- Solvents are sent for distillation and reuse.
- Solvents are burned and the energy recovered.
- Ammonia in wastewater is treated and used in agricultural fertilizers.
- Landfill industrial waste is transformed into solid combustible material and used in cement factory furnaces.
- Silicon wafer scraps are used for aluminum production for the automotive, aviation and photovoltaic industries.
- Paper, cardboard, plastics, and wood are recycled.
- Organic waste is transformed into compost.
- Spent resin and sludge are used in the cement and brick industry.
- COVID-19 protection masks from our French sites are transformed into plastic pellets. Since 2021, we have sent more than 5,600kg of masks for recycling.



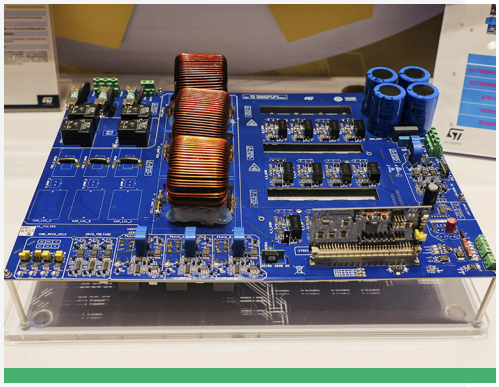


Managing waste beyond our operations

We launched a regional campaign in 2022 to engage employees in green initiatives and encourage them to reduce, reuse and recycle more. To celebrate Earth Day, a series of events was launched by our sales offices in Seoul (Korea), and Hong Kong, Shanghai and Shenzhen (China). The aim was to propose and develop local initiatives within the framework of ST's global sustainability strategy. These proposals included quizzes and public awareness programs designed to raise site accountability and contribute to a circular economy.

FOCUS

AI TO CREATE VALUE FROM E-WASTE



Due to changing consumer demands, electronic waste (e-waste) is one of the fastest growing waste streams globally. E-waste includes appliances, such as computers, cell phones or refrigerators, as well as components from manufacturing. Current treatment methods only recover low quantities of precious metals from e-waste, with the remainder being lost and becoming pollutants.

Our Agrate and Catania sites (Italy) collaborated with a research laboratory and waste recycling company to develop a method to monitor and recycle electronic boards more effectively. ST provided electronic boards along with data on components and their material composition to help develop the system.

A machine learning process is applied to the boards to select components through an image processing system. Once the metals are identified, the boards can be appropriately dismantled, and the selected components can be treated together to increase the metal recycling rate. Using AI to optimize the collection, disassembly, and recycling process helps to support sustainable production and consumption, increases resource efficiency, and improves product end of life management.

Controlling hazardous substances

Our various manufacturing processes can generate hazardous or potentially hazardous waste, such as chemical substances and contaminated plastics. We pay attention to all types of hazardous waste (see **Chemicals**). We seek to identify the best solution among all available treatment technologies to minimize any adverse impact from our activities. In 2022, we identified 42% of our waste as hazardous, 95% of which was reused, recovered, or sent for recycling. The remaining waste was disposed of and treated locally by specially authorized companies.

Contributing to the Sustainable Development Goals

Our commitments and programs related to waste and effluents as described above contribute to:

SDG target 3.9 – Substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution, and contamination.

SDG target 6.3 – Improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

SDG target 12.4 – Achieve the environmentally sound management of chemicals and all wastes throughout their lifecycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.

2025 sustainability goal	Status	Comments
SG16: Reuse or recycle 95% of our waste by 2025.	✓	95%

Annual sustainability goal	Status	Comments
SG15: Ensure an annual landfill waste rate below 3%.	✗	3.7%

Chemicals

PROTECTING THE ENVIRONMENT

It is our priority to responsibly manage chemicals and replace hazardous substances wherever possible.

700+
new risk assessments conducted

100%
PFOA-free across our sites

18,000+
people trained on chemicals

Photolithography equipment, ST Agrate, Italy

We carefully manage the chemical substances and materials we use throughout our operations. This allows us to monitor and address our impacts on people and the environment and to comply with legal and customer requirements.

Applying a rigorous approach

Our use and handling of chemicals is led by a precautionary approach, as set out in Principle 15 of the Rio Declaration and in the ST sustainability charter, available at **www.st.com/sustainabilitycharter** . | 2-23 |

At each of our manufacturing sites, a chemical committee meets regularly to review and evaluate best management practices for identified hazards. Modifications to existing processes are also considered and implemented where necessary. The committee uses a comprehensive approach to make decisions on chemical usage. This includes evaluating chemical compositions, hazards, use conditions, engineering controls, medical recommendations, and industrial hygiene requirements. Risk management measures, personal protective equipment (PPE), waste management, administrative controls, and training requirements are also considered. By rigorously applying this process, we can identify critical substances as soon as they are introduced or reclassified.

We recorded 4,310 chemicals in use in 2022 and we conducted more than 700 new risk assessments, achieving over 23,000 validated risk assessments by the end of the year.

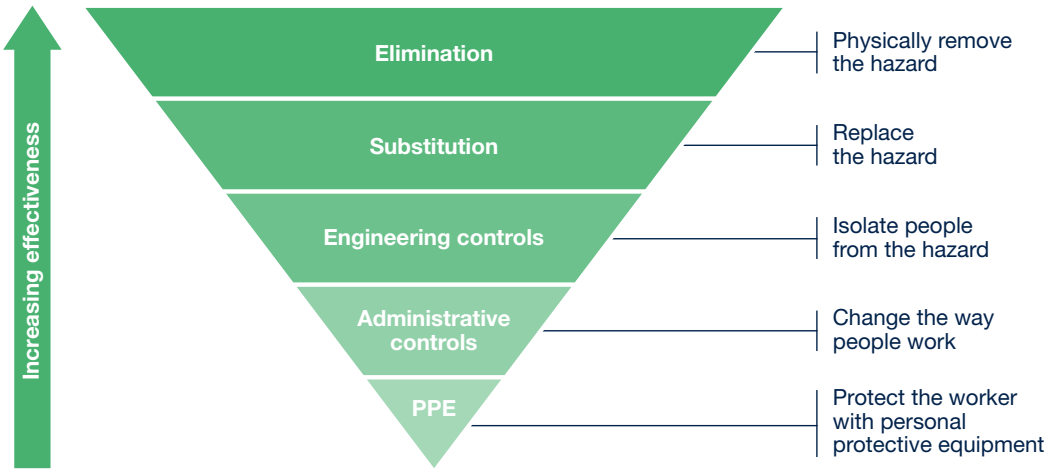
700+
new risk assessments

To minimize potential environmental, health and safety (EHS) risks, both to our workers and the environment, we have stringent guidelines for identifying and assessing major risks. We use a four-step risk assessment process

that incorporates two complementary methodologies. It is the site manager's responsibility to ensure these risk assessments are conducted and any residual risk is minimized.

Since early 2000, we have applied the hierarchy of controls approach to our chemical management procedures. When specific chemicals or materials cannot be eliminated or substituted with less hazardous alternatives, we implement engineering measures and administrative controls to reduce workers' and environmental exposure. I 3-3 I

Hierarchy of Controls



Safety of our people

Our goal is to prevent occupational injury and illnesses for all our workers. The health of all employees working with chemical substances is monitored through medical surveillance. This includes biomonitoring – a process to assess an individual's exposure to natural and synthetic chemicals based on analysis of human tissue and fluid samples. As an additional precaution, we regularly analyze the air in work areas to verify that our risk management measures are effective. The results are compared to applicable threshold limit values (TLV). In 2022, over 11,000 measurements were performed, all but eight of these measurements were below the applicable TLVs. Further investigation showed the eight measurements that failed were the result of insufficient ventilation, which has now been corrected.

All workers receive specialist training before being assigned potentially hazardous tasks or implementing process changes. At present, this includes instruction and preparation to:

- identify specific hazards
- recognize and understand chemical labels
- apply management methods
- only use equipment in good condition
- select and wear the required PPE
- be ready to react in case of contamination, contact, or an emergency
- ensure preventive maintenance
- properly dispose of spent chemicals according to waste management practices

18,000+

hours of training on chemicals

In 2022, we provided more than 18,000 hours of training on chemical substance management across our manufacturing sites.

Protecting the environment

Reducing environmental emissions across the domains of air, water, and waste is a priority. We treat our emissions (see **Water**, **Waste**), and where possible, enforce replacement programs for hazardous substances throughout our value chain.

Volatile organic compounds (VOC) are compounds that easily become gases or vapor, some of which may have adverse effects on human health and the environment. We pay specific attention to controlling VOC emissions and use online monitoring to make sure our installations are working effectively.

Substituting hazardous substances

We search for the best solutions using technology and innovation to replace hazardous materials in our manufacturing processes.

Removing perfluorooctanoic acid (PFOA) related substances

Following 10 years of continued efforts, we reached our objective of being 100% PFOA-free in 2022. This was 3 years ahead of our target, as defined by the World Semiconductor Council and European Union regulation. The phasing out of chemicals containing PFOA-related substances used in the photolithography process was completed in February at our Crolles site (France). An alternative product was qualified and introduced into manufacturing. This required adjustments in several processes to achieve the necessary component performance.

This meant that PFOA-related substances were totally eradicated across all our operations without any supply chain disruption, while improving process quality and equipment efficiency, and maintaining product performance.

100%

PFOA-free

Working together for alternatives to lead

We have been part of the Die Attach5 industry consortium since its inception in 2009. The consortium is composed of five semiconductor companies and works on identifying alternatives to lead-based solders. Over the last 14 years, more than 160 materials from 15 suppliers have been evaluated, with around 50 undergoing extensive testing. So far, no reliable lead-free technology has been found for power semiconductor components, but the research is promising for a long-term solution.

In July 2022, consortium members met at our Agrate site (Italy). They discussed the practicalities of manufacturing with the selected new materials, as well as the viability of the test results. The preliminary results identified several new materials suitable for the manufacturing of advanced devices.

Striving for better

In 2012, di (2- ethylhexyl) phthalate (DEHP) was added to REACH[2] Annex XIV preventing its use in Europe. We immediately started a program to replace it, which resulted in all European products being DEHP-free by 2013. Subsequently, we decided to go beyond the regulation and replace the substance across all products worldwide. At present, only our Muar site (Malaysia) is using DEHP in an ancillary material in the assembly process. A substitute solution and process have been proposed to customers and are in the final phase of qualification.

[2] REACH: Registration, Evaluation, Authorization and Restriction of Chemicals.

Giulia Mancini
Chemical Programs Senior Manager,
Corporate Sustainability

Managing chemicals is complex and requires a multi-faceted approach. We address emerging EHS regulations and anticipate future regulations while taking into consideration new customer demands. Any substance elimination or process changes must be carefully implemented to ensure manufacturing remains stable and quality is maintained. This involves continual communication with internal and external teams to find the best solutions. Ultimately these actions help us protect people, preserve the environment, and provide the highest standards for our customers."

Aligning with stakeholders' expectations

Compliance

We follow the highest standards to ensure compliance with all applicable regulations on chemicals for our manufacturing sites and our products. It is the responsibility of each site to ensure compliance, based on their specific operations.

When developing new products, their compliance is verified at fixed product development milestones. At the R&D phase, we only consider and select compliant materials to ensure we act in accordance with requirements, such as RoHS[3] and ELV[4].

Furthermore, we strive to eliminate the use of restricted substances by design. Thanks to new designs, reduced dimensions and the lower energy consumption of our chips, we have had ongoing success in decreasing the use of lead in the assembly process (see our **ECOPACK results**). We also continue to identify new materials with reduced antimony and halogen content.

ST products may be subject to Substances of Concern In Products declarations, based on the presence of Substances of Very High Concern. In 2022, we continued to declare new products in the Europena Chemicals Agency portal to ensure information is available for safe end of life disposal.

Across our sites, we continue to work on hazardous substance process management to identify, control, quantify, and report any hazardous elements in components, according to the IECQ 080000 standard.

Customers

Chemical legislation is evolving globally to reduce environmental impacts during manufacturing. It remains a significant consideration for key customers who closely monitor developments in our products, processes and compliance. Information on materials contained in ST products can be found through the IPC 1752 material declaration which is available on **www.st.com** . Queries relating to chemical substance usage accounted for almost 20% of our EHS enquiries in 2022. Thanks to the measures we have in place, we are well positioned to address them. During the year, our Shenzhen site (China) successfully passed a remote customer audit related to substance management in components.

As a member of the Responsible Business Alliance (RBA), we are working to become aligned with the RBA Industry Focus Process Chemical policy (IFPC). All chemicals listed in the policy have already been eradicated from our own operations. In 2022, we completed an IFPC assessment to locate these chemicals within our supply chain. We are now working on measures to replace them, prioritizing recommendations by the Clean Electronic Program Network.

[3] RoHS: Restriction of Hazardous Substances.
[4] ELV: End of Life of Vehicles.

Suppliers

We require our suppliers to respect our EHS-regulated substances list, which contains more than 7,700 substances and is regularly reviewed. We also require them to confirm their compliance through analytical certificates, safety datasheets and commitments. In 2022, 95% of our key suppliers committed to our substances specification.

Contributing to the Sustainable Development Goals

Our commitments and programs as described above contribute to:

SDG target 3.9 – Substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

SDG target 6.3 – Improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

SDG target 12.4 – Achieve the environmentally sound management of chemicals and all wastes throughout their lifecycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.

2025 sustainability goal	Status	Comments
In line with the WSC statement, remove PFOA and PFOA-related substances in all manufacturing chemicals by 2025.	✔	100%

Annual sustainability goal	Status	Comments
SG19: Follow highest standards for 100% of the materials we use: Hazardous Substances Process Management (IECQ080000) and responsible sourcing initiatives, such as RMI.		HSPM: 95% RMI: 100%

Environmental indicators

This section includes indicators and GRI Standard disclosures.

Our environmental data covers our 11 largest manufacturing sites, representing more than 95% of the overall environmental impact of the Company.

The methodologies used to calculate data are detailed in internal Company procedures, which are regularly reviewed during third-party environmental audits (EMAS, ISO 14001, ISO 50001, ISO 14064).

See **ST site certifications table** in business indicators.

ST follows the Greenhouse Gas (GHG) Protocol for managing its GHG emissions. The resulting CO_2 emissions are reported according to recognized international standards (Reference – World Resources Institute (2004) GHG Protocol – A Corporate Accounting and Reporting Standard).

Scope 1 – Direct emissions resulting from operations

- Combustion emissions: World Resources Institute (2008) – GHG Protocol Calculation tool for stationary combustion v.4.1
- PFC emissions: 2007 IPCC fourth Assessment Report Climate Change. Table 2.14. Lifetimes, radiative efficiencies and direct GWPs relative to CO_2 www.ipcc.ch

Scope 2 – Indirect emissions resulting from purchased electricity

- World Resources Institute (2014). GHG Protocol tool for stationary combustion. Version 4.8, GHG Protocol Scope 2 guidance

Scope 3 – Emissions resulting from travel and transportation

- Mobile Combustion GHG Protocol tool v.2.6
- Supplement to the Corporate Value Chain (Scope 3) accounting and reporting standard

Environmental investments (%)

	2018	2019	2020	2021	2022
% of total Company investments	0.17	0.35	3.06	2.71	**0.41**

Environmental burden – net values | 305-6 | SDG 3.9 - SDG 6.3

	2018	2019	2020	2021	2022
Emissions to air					
Global warming[1] (MTCE)	428,912	382,277	310,041	284,726	**265,170**
Ozone depletion (kg R11 Eq)	0.00	0.00	0.00	0.00	**0.00**
VOCs (tons)	297	139	148	193	**238**
Atmospheric acidification (Kg SO_2 Eq)	43,856	46,018	51,207	62,178	**60,102**
Photochemical oxidant creation (Kg ethylene Eq)	43,749	35,799	38,295	49,548	**55,801**
Air emission toxicity[2] Kg PH_3 Eq	2,240	1,414	3,192	3,717	**3,311**
Emissions to water[3]					
Eutrophication (Kg (P+N))	164,027	169,575	126,286	184,147	**176,858**
Aquatic oxygen demand (Kg COD[4])	605,100	632,625	656,045	1,213,093	**1,317,922**
Heavy metals to water (Kg heavy metals)	14,222	9,233	6,880	9,162	**9,351**
Aquatic ecotoxicity (Kg Cu Eq)	5,764	5,211	4,290	5,033	**5,446**

(1) Includes direct Greenhouse gas (GHG) emissions from our manufacturing plants and indirect emissions from energy consumption and transport, reported in Metric Tons of Carbon Equivalent (MTCE). Does not include GHG emissions from subcontractors and foundries.
(2) Emissions of substances are considered only if they exceed the minimum threshold of 3ppm, expressed in phosphine equivalent. For Volatile Organic Compounds, Atmospheric acidification, Photochemical Oxidant Creation and Air emission toxicity, the particulate matter is not covered.
(3) Domestic wastewater is included.
(4) Total Chemical Oxygen Demand (COD).

Summary of net CO_2 eq emissions (KTons)[1]
| 305-1 | 305-2 | 305-3 | 305-5 | SDG 13.1

	2018	2019	2020	2021	2022
Direct emissions Scope 1	644	557	486	481	**504**
Indirect emissions (purchased electricity) Scope 2 market-based[2]	791	702	564	473	**358**
Other indirect emissions (transportation[3]) Scope 3	137	143	86	90	**111**
Total emissions	**1,573**	**1,402**	**1,137**	**1,044**	**972**

(1) The sums may not add up due to rounding of the figures.
(2) Market-based calculation method according to GHG Protocol standard.
(3) The transportation emissions value is a global estimate of employee transportation and transportation of goods.

CO_2 emissions equivalent | 305-4 | 305-5 | SDG 13.1
Per unit of production – normalized values

	2018	2019	2020	2021	2022
CO_2 emissions	84	77	70	50	**41**

Baseline 100 in 2016.

Market and location based[1] scope 2 net CO_2 eq emissions (KTons) | 305-2 | 305-5 | SDG 13.1

	2018	2019	2020	2021	2022
Indirect emissions (purchased electricity) Scope 2 market-based	791	702	564	473	**358**
Indirect emissions (purchased electricity) Scope 2 location-based	824	787	782	780	**857**

(1) Market- and location-based calculation method according to GHG Protocol standard.

Direct and indirect energy consumption by primary sources[1] (%) | 302-1 | 302-4 |

	2018	2019	2020	2021	2022
Green electricity purchased	21.2	26.4	39.6	46.5	**56.6**
Photovoltaic and thermal solar electricity produced by ST	0.1	0.1	0.1	0.1	**0.1**
Electricity purchased from nuclear (CO_2 free)	9.2	6.9	6.1	6.2	**5.7**
Electricity purchased from fossil fuel sources	61.8	58.6	46.6	38.7	**29.2**
Natural gas	7.6	7.8	7.5	7.7	**7.6**
Other fuels	0.3	0.3	0.2	0.9	**0.7**

(1) The sums may not add up to 100% due to rounding of the figures.

PFC emissions | 305-4 |
Per unit of production – normalized values

	2018	2019	2020	2021	2022
PFC emissions	90	80	74	56	**54**

Baseline 100 in 2016.

Energy consumption by source | 302-1 | 302-4 |

	2018	2019	2020	2021	2022
Electricity (TJ[1])	8,094	8,208	8,716	8,995	**9,495**
Natural gas (TJ[1])	666	696	706	754	**782**
Others (TJ[1])	22	22	31	96	**87**
Total energy (TJ[1])	8,782	8,926	9,453	9,845	**10,364**
Energy from electricity (%)	92.2%	92.0%	92.2%	91.4%	**91.6%**

(1) Terajoule.

Consumption of energy | 302-3 | SDG 7.3
Per unit of production – normalized values

	2018	2019	2020	2021	2022
Consumption of energy	81	86	99	81	**80**

Baseline 100 in 2016.

Consumption of electricity | 302-3 |
Per unit of production – normalized values

	2018	2019	2020	2021	2022
Consumption of electricity	82	86	99	81	**81**

Baseline 100 in 2016.

Consumption of natural gas | 302-3 |
Per unit of production – normalized values

	2018	2019	2020	2021	2022
Consumption of natural gas	73	80	88	74	**73**

Baseline 100 in 2016.

Consumption of water
Per unit of production – normalized values

	2018	2019	2020	2021	2022
Consumption of water	84	91	106	89	**88**

Baseline 100 in 2016.

Water withdrawal by source (1,000m^3)[1] | 303-3 | SDG 6.4

	2018	2019	2020	2021	2022
Groundwater	4,237	3,029	2,880	2,747	**2,839**
Surface water	0	0	0	0	**0**
Municipal water supplies	13,967	15,814	17,342	18,698	**19,668**
Total withdrawal	**18,204**	**18,843**	**20,223**	**21,445**	**22,507**

(1) The sums may not add up due to rounding of the figures. All water withdrawal is freshwater.

Water withdrawal by source in water stress area (1,000m^3)[1] | 303-3 | SDG 6.4

	2019	2020	2021	2022
Groundwater	0	0	0	**0**
Surface water	0	0	0	**0**
Municipal water supplies	885	767	717	**886**
Total withdrawal	**885**	**767**	**717**	**886**

(1) All water withdrawal is freshwater. Bouskoura site (Morocco) is located in a water stress area.

Recycled and reused total water | 303-5 | SDG 6.3 - SDG 6.4

	2018	2019	2020	2021	2022
Ultrapure water used (1,000m^3)	–	11,243	12,331	13,194	**13,500**
Total water used in water stress area[1] (1,000m^3)	1,329	1,316	1,392	1,512	**1,971**
Total water used in non-water stress area (1,000m^3)	29,325	30,392	32,663	34,375	**36,667**
Total water used	30,654	31,708	34,055	35,888	**38,638**
Total volume of water recycled and reused (1,000m^3)	12,450	12,870	13,833	14,445	**16,131**
Water recycled and reused (%)	40.6%	40.6%	40.6%	40.3%	**41.8%**

(1) Bouskoura site (Morocco) is located in a water stress area.

Total water discharge | 303-4 |

	2018	2019	2020	2021	2022
Water discharge (1,000m^3)	14,926	15,621	15,912	17,878	**18,592**
Treated in ST wastewater treatment plant (%)	68.2%	68.8%	84.8%	85.9%	**86.6%**
Treated in external wastewater treatment plant[1] (%)	57.1%	55.3%	55.7%	59.2%	**59.3%**

[1] Part of this water has already been treated in ST wastewater treatment plants, meaning that 100% of water discharged is treated either internally, externally, or both.

Total water discharge by source (1,000m^3)[1] | 303-4 |

	2018	2019	2020	2021	2022
Groundwater	0	0	0	0	**0**
Surface water	7,410	7,941	8,106	8,389	**8,556**
Municipal water supplies	7,516	7,680	7,806	9,489	**10,035**
Total discharged	**14,926**	**15,621**	**15,912**	**17,878**	**18,592**

[1] The sums may not add up due to rounding of the figures.

Total water discharge by source in water stress area (1,000m^3)[1] | 303-4 |

	2018	2019	2020	2021	2022
Groundwater	0	0	0	0	**0**
Surface water	601	568	456	259	**305**
Municipal water supplies	0	0	0	0	**0**
Total discharged	**601**	**568**	**456**	**259**	**305**

Waste in tons[1] | 306-3 | SDG 12.4

	2018	2019	2020	2021	2022
Total hazardous waste	16,483	16,877	19,605	22,568	**24,604**
Total non-hazardous waste	28,345	26,716	29,406	33,104	**34,330**
Total waste	**44,828**	**43,593**	**49,012**	**55,672**	**58,934**

[1] The sums may not add up due to rounding of the figures.

Waste split in tons[1] | 306-4 | 306-5 |

	2018	2019	2020	2021	2022
Reuse	2,097	1,614	3,628	3,825	**1,460**
Sent for recycling	34,434	33,607	33,653	38,952	**44,842**
Recovery[2]	4,642	5,224	5,944	7,559	**9,653**
Incineration	1,671	1,497	2,809	1,538	**818**
Landfill	1,983	1,651	2,977	3,798	**2,161**
Total waste	**44,828**	**43,593**	**49,012**	**55,672**	**58,934**

[1] All waste is diverted offsite. The sums may not add up due to rounding of the figures.
[2] Waste burnt with recovery of energy (combustion).

Non-hazardous waste split[1] (%) | 306-4 | 306-5 |

	2018	2019	2020	2021	2022
Reuse	5.0	3.5	10.0	9.7	**1.9**
Sent for recycling	83.9	86.1	69.1	72.6	**86.0**
Recovery[2]	3.3	3.6	4.4	4.1	**7.2**
Incineration	2.4	2.4	7.8	3.2	**0.6**
Landfill	5.4	4.4	8.8	10.3	**4.3**

[1] The sums may not add up to 100% due to rounding of the figures. All waste is diverted offsite.
[2] Waste burnt with recovery of energy (combustion).

Hazardous waste split[1] (%) | 306-4 | 306-5 | SDG 12.4

	2018	2019	2020	2021	2022
Reuse	3.1	3.1	3.5	2.7	**3.2**
Sent for recycling	71.8	70.9	68.0	66.1	**62.3**
Recovery[2]	18.3	20.0	23.8	27.5	**29.2**
Incineration	4.8	3.9	2.7	2.1	**2.6**
Landfill	2.0	2.1	2.0	1.7	**2.7**

[1] The sums may not add up to 100% due to rounding of the figures. All waste is diverted offsite.
[2] Waste burnt with recovery of energy (combustion).

WEEE

As a supplier of components to the electronics industry (and not a manufacturer of electronic equipment), our silicon products are not directly affected by the European Directive 2012/19/ EU Waste of Electrical and Electronic Equipment (WEEE). However, since 2018, demonstration and evaluation boards supplied by ST are subject to the Directive.

Consumption of chemicals in tons

	2018	2019	2020	2021	2022
Chemicals	23,127	21,780	20,641	24,881	**26,013**

Consumption of chemicals SDG 12.4
Per unit of production – normalized values

	2018	2019	2020	2021	2022
Consumption of chemicals	100	98	101	96	**95**

Baseline 100 in 2016.

Elimination of Substances of Very High Concern (SVHC) SDG 12.4

	2018	2019	2020	2021	2022
Total number of action plans[1] completed since 2008	23	23	23	24	**25**

[1] One substance can be subject to several action plans to be eliminated from different ST processes.

ST exposure to Substances of Very High Concern (SVHC)

	2018	2019	2020	2021	2022
SVHC total list	191	201	209	219	**224**
SVHC used in ST	26	27	30	34	**41**
SVHC Annex XIV used in ST	1	3	4	4	**4**
Total SVHC used in ST replaced since 2008	7	7	7	7	**7**

Deployment of ST substances specification to key suppliers and subcontractors (%)

	2018	2019	2020	2021	2022
Response rate from key partners	100	97	100	99	**100**
Commitment from key partners to ST substances specification	89	72	91	91	**95**

Spills in 2022

None

Fines and non-monetary sanctions in 2022 | 2-27 |

None

Acting together

460
supplier audits since 2015

100%
of our products are conflict-minerals free

100,000+
beneficiaries of STEM your way

© CGénial Foundation

ST Rousset ambassadors, Yes We Code CGénial event, France

Responsible supply chain

ACTING TOGETHER

We aim to systematically assess, mitigate or eliminate sustainability risks in our operations and extended supply chain.

91%
of suppliers agree to comply with ST standards

460
supplier audits since 2015

1,700+
supplier employees trained

Subcontractors, ST Ang Mo Kio, Singapore

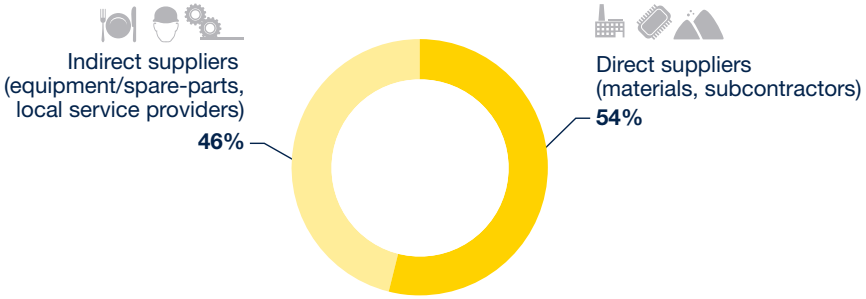
As a multinational company with a complex supply chain, our corporate social responsibility goes beyond our own operations and includes robust due diligence of all our suppliers and subcontractors. We are committed to partnering only with suppliers who share our values of respecting people and the environment. We regularly raise the standards expected from them and reinforce our internal capacity to address and remediate any adverse impacts identified. I 3-3 I

Our supply chain

We procure materials, goods, and services from approximately 6,600 tier one suppliers of diverse types and sizes. They range from manufacturing subcontractors, material suppliers, equipment and spare-parts suppliers, to onsite service providers and labor agencies. Our procurement spend is split mainly between Asia (51%) and Europe (42%). We manage 32% of our procurement volume locally. The rest is managed centrally at corporate level. The analysis of our spend is an integral part of our risk assessment process. I 2-6 I 204-1 I

42%
of our procurement spend in Europe

Procurement volume by category | 2-6 |



Adapting to new challenges

Anticipating and adapting to the new regulatory context

To better anticipate our compliance journey and create value from it, we pay close attention to recently adopted and upcoming regulations in Europe and the United States regarding due diligence in the supply chain, including forced labor prevention. As we move from due diligence disclosure obligations to import bans, the business impact of supply chain incidents and the need to adopt agile management systems and processes are increasing. In 2022:

- We developed an active public policy strategy and participated in several industry initiatives, including due diligence working groups with the Responsible Business Alliance (RBA), the European Semiconductor Industry Association (ESIA), the Fédération des Industries Électriques, Électroniques et de Communication (FIEEC) and Entreprises pour les Droits de l'Homme (EDH).
- We organized due diligence committees involving different corporate organizations to discuss our supply chain sustainability management. We also continued our work, initiated in 2021, with our monthly cross-functional taskforce on forced labor. Its main objective is to adapt our supply chain management approach to new regulatory challenges.
- We maintained our efforts to screen all our tier one suppliers automatically and continually against restricted party lists (European and US sanctions lists).

Monthly

taskforce on forced labor risk

When specific risks are identified, such as forced labor in our upstream supply chain, we require additional elements to improve product traceability and adapt our procurement decisions if necessary. Our responsible mineral sourcing program is an example (see **Responsible mineral sourcing**), and we participate in RBA working groups to identify opportunities to extend this due diligence to new raw materials, locations, or activities at risk.

More effective governance

With increasing expectations around the sustainability of value chains, including human rights, climate change, ethics, quality, trade compliance, and business resilience, we faced two main challenges: consistency in cross-functional approaches and resources. To help address these issues, we created a new organization in 2022 under the procurement department called Third-Party Management (TPM). This has dedicated resources for enhancing our supplier onboarding, monitoring, and assessment capacities. The benefits of this new governance structure include:

New Third-Party Management

organization in 2022

- more resources to support our responsible supply chain program
- more synergies and leverage with procurement
- more effective organization and consistent processes
- alignment across all organizations, with domain experts interfacing with TPM

Risk management

Our overall approach to managing our supply chain starts with the robust identification of risks. This enables us to take targeted actions to control these risks and remediate any negative impacts identified.

Business risks

To secure business continuity, we categorize strategic suppliers according to spend level, product scarcity, and the availability of alternative sources. We assess these business-critical suppliers using real-time supplier information, obtained via an artificial intelligence platform. Any events potentially affecting our supply chain are detected and help us to take action to strengthen our resilience.

Sustainability risks

To identify, manage, prevent, and mitigate sustainability risks, we conduct regular risk assessments of our supply chain during the lifecycle of our business relationship.

- We assess risks before onboarding suppliers. In 2022, 100% of our new material suppliers were assessed for sustainability risks, including risks on forced labor, safety, and the environment.
- We conduct an annual risk assessment of our tier one suppliers based on specific risk criteria. These include supplier activity risks and supplier location risks extracted from a supply chain intelligence platform using both publicly available and audit data. We refine the process according to spend and the regular presence of suppliers on site. At the end of 2022, we identified 340 suppliers across 535 facilities as being high risk in terms of sustainability.
- When specific risks, such as forced labor, are identified in our upstream supply chain, we may extend our due diligence to sub-tier suppliers. In 2022, we asked 15 raw material suppliers additional questions to better assess the risk of forced labor through upstream sourcing.

100%

of new material suppliers assessed on sustainability risks

Impact-driven monitoring

Once onboarded, suppliers must declare they have read and understood ST's business ethics and corporate responsibility statement, and that they agree to comply with the latest version of the RBA code of conduct and apply it in their own supply chain.

In addition, we require our high-risk suppliers to undertake a three-step process.

Commitment letter

Suppliers sign a supply chain responsibility commitment letter, agreeing to comply with the RBA code, to complete self-assessment questionnaires and accept second or third-party audits.

Self-Assessment Questionnaire (SAQ)

Suppliers complete an RBA self-assessment. The results enable us to identify areas that require attention.

RBA-based audit and follow-up

Suppliers receive a third-party RBA Validated Assessment Program (VAP) audit or a second-party RBA-based audit to monitor and control compliance and address areas of non-compliance with corrective actions.

In 2022:

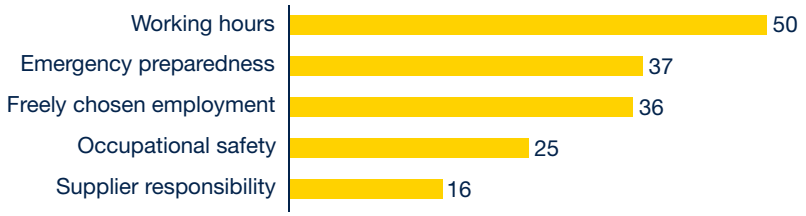
- 99% of our high-risk suppliers signed the RBA commitment letter
- 394 suppliers' facilities completed a self-assessment questionnaire
- 116 corporate social responsibility audits were conducted in one year – the most ever

All audited suppliers with non-conformances must implement corrective actions. These are verified in a follow-up closing audit.

If the supplier is unable or unwilling to meet these requirements, we may impose sanctions. These could include:

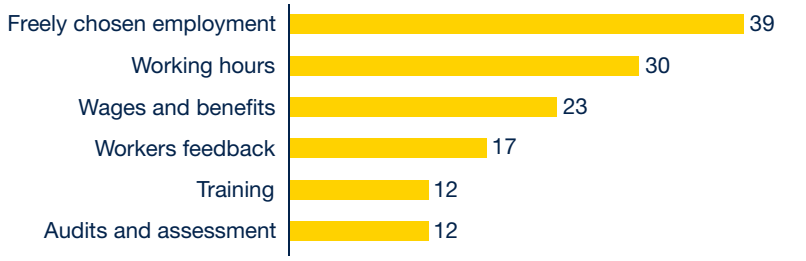
- a warning letter from executive management
- selecting alternative products or services to decrease the supplier's market share
- temporary or definitive termination of the contract and the supplier being blacklisted

Top audit findings of material, equipment/spare-parts suppliers and subcontractors[1]
I 308-2 I 414-2 I 409-1 I



[1] Number of findings based on results of 46 third-party RBA audits.

Top audit findings of local service providers[1] I 308-2 I 414-2 I 409-1 I



[1] Number of findings based on results of 70 local service providers' 2nd party RBA audits.

Detection and remediation are the two main approaches to decrease major risks. In 2022, remediation measures obliged our suppliers to reimburse US$248,000 in recruitment fees unfairly paid by workers, an 80% increase on 2021.

US$248,000

of recruitment fees reimbursed to workers

FOCUS

RAISING THE BAR FOR SUBCONTRACTOR PERFORMANCE

Our manufacturing subcontractors are an important part of our procurement activity, and we consider most of them as high-risk suppliers. In 2022, we raised our expectations relating to social responsibility and environmental management by introducing strategic objectives and monthly monitoring of these objectives.

More specifically, for our top subcontractors' back-end facilities we:

- organized dedicated strategy meetings
- developed a roadmap to have 100% RBA third-party audited
- achieved ISO 14001 and ISO 45001 certifications for them all
- set health and safety objectives (recordable case rate and severity rate)
- required them to adopt carbon neutrality objectives: 100% of sites have set annual reduction targets to reach carbon neutrality

In addition to this, we enhanced environmental reporting on carbon emissions, energy consumption, water, and waste KPIs for our top front-end and back-end subcontractors, representing 95% of our subcontracting spend. This data will enable us to set a baseline for progress and for developing lifecycle assessment in our supply chain.

We also introduced awareness and communication sessions for new onboarded subcontractors to develop their understanding and commitment around social and environmental management.

Capacity building on sustainability

Engaging our buyers

From December 2021 and throughout 2022, all ST buyers were enrolled in the RBA's responsible procurement training program, with 89 buyers completing at least one training module.

In addition, we regularly invite our procurement community to participate in responsible supply chain quarterly calls where we present the most recent updates on regulations, risk identification, and monitoring processes.

Training our suppliers

We not only manage our suppliers appropriately, we also support them in raising their awareness of sustainable practices. We provide e-learning on risk areas such as labor (including working hours and forced labor), ethics, health and safety and the environment, and through dedicated awareness sessions where necessary.

Ng Wee Keat
Assistant Director, GMP Recruitment Services (S) Pte Ltd, Singapore

The GMP Group has always been a supporter of ST's supplier engagement program based on the Responsible Business Alliance (RBA) standard. The RBA e-learning platform allows us to conveniently learn or refresh our knowledge and understanding, keeping us up to date with the RBA's code of conduct. Since using the platform, it has greatly helped us in our recruitment process by holding us accountable for responsible business conduct and practices."

In 2022, more than 250 supplier employees, representing around 100 different companies, went through our customized learning paths in the RBA e-learning platform. In addition, our sustainability champions organized awareness and training sessions. Overall, more than 1,700 supplier employees went through training actions through e-learnings, meetings, webinars and workers' voice channels in 2022.

Grievance reporting

Like our own employees, our suppliers and their workers have the right to use the independent multilingual Ethics Hotline, accessible on our website (see **www.st.com**), to share any concerns. This channel is reachable online or by phone in local languages and allows reports to be made anonymously if desired. In case of grievances, ST and the supplier must ensure complainants are protected against any retaliation. I 3-3 I

Contributing to the Sustainable Development Goals

Our commitments and programs as described above contribute to:

SDG target 8.7 – Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking, and secure the prohibition and elimination of the worst forms of child labor.

SDG target 8.8 – Protect labor rights and promote safe and secure working environments for all workers.

SDG target 17.16 – Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.

2025 sustainability goal	Status	Comments
SG20: Conduct an annual risk assessment of our supply chain and audit 100% of our high-risk suppliers by 2025.	◌	Risk assessment conducted Audit: 36.4% with valid audit (2 year cycle – 195 out of 535 facilities at risk)

Annual sustainability goal	Status	Comments
≥90% of suppliers at risk for sustainability signed an agreement to comply with the RBA code of conduct.	✓	99%

Responsible mineral sourcing

ACTING TOGETHER

We use a holistic approach to identify, manage, and monitor responsible mineral sourcing.

RMI
member since 2011

600+
customer requests on mineral sourcing

100%
of products are conflict-mineral free

A diverse range of minerals and metals are needed to manufacture semiconductors. Sourcing these components is complex and requires robust processes to manage the risks. The multitier nature of the supply chain adds further difficulties, as does its global scale, which may include areas affected by conflict.

At ST we have developed a holistic approach to identify, manage, and monitor responsible mineral sourcing. We are closely engaged with our suppliers and conduct due diligence in our sub-tier supply chain. Our priority is to ensure we do not procure raw materials that have a negative impact on people, and we actively seek solutions to limit our impact on the environment.

Our policy statement is fully aligned with OECD due diligence guidelines. It is available at **www.st.com** . | 3-3 |

A long journey

Acting on 3TGs

Tantalum, tin, tungsten and gold, collectively known as the 3TGs, are used in electronic components such as semiconductors. They are also potential ‘conflict minerals’. This refers to minerals (and the associated refined metals) that are mined, traded, controlled, supported, or financed by illegal armed groups, causing serious human rights violations and environmental damage in conflict-affected and high-risk areas (CAHRAs).

As part of our strategy to address this risk, we joined the Responsible Minerals Initiative (RMI) in 2011 and started to implement a conflict minerals process focused on the Democratic Republic of Congo (DRC) and neighboring countries. In 2012, we released our first Conflict Minerals Reporting Template (CMRT). By implementing new processes and reporting templates within our supply chain, we achieved 100% compliance with the Responsible Minerals Assurance Process (RMAP). From 2017 to 2020 and again in 2022, all our products were conflict free.

RMI
member since
2011

Extending to cobalt

In 2016, we extended our efforts to monitor cobalt, another potential conflict mineral found in our products and technologies. Two years later, cobalt became part of our standard process, and we published our first Cobalt Reporting Template (CRT), issued by the RMI. At the end of 2021, we started using the Extended Minerals Reporting Template (EMRT) which is a combination of the CRT and Mica Reporting Template (MRT).

Our 2022 EMRT demonstrates significant progress, 60% of the smelters in our supply chain are now RMAP compliant, compared to 24% in 2021.

As an RMI member, we contribute to the working group and plan to address further unregulated minerals in the future.

Risk assessment and mitigation

An essential requirement for our suppliers is to use minerals originating from smelters that conform with the RMAP standard. Each new supplier is screened, and every new raw material used is systematically pre-assessed to determine whether it falls within the scope of our responsible minerals sourcing program.

We are committed to removing all non-compliant smelters from our supply chain. Every year, suppliers complete a questionnaire on our requirements, enabling us to evaluate their maturity and their willingness to commit to due diligence. Additionally, suppliers are required to provide us with their updated CMRT. In case of changes in the supply chain, suppliers are expected to notify us within two weeks and provide a compliant reporting template within 90 days.

We ensure we remain vigilant by sharing any risks we identify with ST management every quarter.

We encourage any stakeholders concerned about non-compliance or risk of non-compliance to raise a grievance either on ST's independent multilingual Ethics Hotline, accessible on our website (see **www.st.com**) or through the **RMI grievance portal** .

2022 overview

As part of our ongoing due diligence efforts, in 2022 we declared 229 smelters from 154 suppliers and subcontractors in our 3TGs supply chain. At the end of the year, 100% of these smelters were validated as RMAP compliant, compared to 99% in 2021. During this period, we removed 22 smelters from our supply chain and introduced 53 new smelters.

Conflict minerals – suppliers/subcontractors and smelters

	2018	2019	2020	2021	2022
Number of suppliers and subcontractors associated with at least one 3TG metal	128	124	124	137	**154**
3TG suppliers and subcontractors that have completed the RBA-RMI[1] due diligence survey (%)	100%	100%	100%	100%	**100%**
Number of smelters identified in ST's raw materials supply chain	182	167	168	163	**222**
Number of smelters identified in ST subcontractors' supply chain	251	253	238	183	**217**
Total number of smelters identified in ST supply chains	251	253	239	189	**229**

[1] Responsible Minerals Initiative.

New challenges

In 2022, we faced additional challenges due to the global geopolitical context, the Russia/Ukraine conflict, and new legislation on forced labor. This meant it took us five months to complete our annual supplier questionnaire, the longest period since 2013. Challenges included:

- suppliers' responsiveness
- customers' individual and more stringent approaches to anticipate upcoming risks and legislation
- companies conducting CMRT exercise only once a year

Alice Ferreira
Responsible Minerals Specialist, Product Quality and Reliability group

Facing a complex geopolitical environment, we have worked with the responsible minerals' community globally to overcome these new challenges. We have adopted a risk-based approach, leveraging collaboration and enhanced transparency to identify and tackle adverse impacts. I am proud to represent ST in the working groups responsible for driving due diligence for new minerals in the years ahead."

The CMRT is an essential tool for us to share our supply chain evolution with our customers. In 2022, we released four CMRT updates. The number of customer requests for CMRTs increased by 50%, to more than 600. In view of this heightened demand, we implemented a new communication process to make relevant information and updates more accessible. Updates to the CMRT are now automatically communicated to customers who have already raised a request. A total of 165 customers benefited from this new process in 2022.

600+

requests on responsible mineral sourcing

EU regulation

In 2021, the EU due diligence regulation came into force, and we decided to voluntarily engage in the RMI Downstream Assessment Program (DAP) to assess the maturity of our responsible minerals sourcing program. This gave us the opportunity to update internal procedures and practices. This included:

- ensuring alignment with OECD due diligence guidance for responsible supply chains of minerals from CAHRAs
- defining risks and formalized response strategies
- communicating ST and RMI grievance processes internally, on our portal and in supplier communications
- reinforcing internal and external stakeholder training using RMI materials
- implementing formal reporting to ST management

Our DAP audit encompassed our entire organization and minerals throughout our supply chain. In 2022, ST was confirmed as fully compliant and the first semiconductor company to have passed this audit.

We revised our US Security and Exchange Commission (SEC) report to integrate changes and build a unique SEC and EU reporting framework.

Contributing to the Sustainable Development Goals

Our commitments and programs as described above contribute to:

SDG target 8.7 – Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking, and secure the prohibition and elimination of the worst forms of child labor.

SDG target 8.8 – Protect labor rights and promote safe and secure working environments for all workers.

SDG target 17.16 – Enhance the global partnership for sustainable development, complemented by multistakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.

Annual sustainability goal	Status	Comments
SG19: Follow highest standards for 100% of the materials we use: Hazardous Substances Process Management (IECQ080000) and responsible sourcing initiatives, such as RMI.		HSPM: 95% RMI: 100%

Community and education

ACTING TOGETHER

We encourage our employees to organize and participate in community initiatives to support social and economic development.

450
STEM your way events globally

660+
community events worldwide

220,000+
beneficiaries of community initiatives

Robotics Workshop, ST Greater Noida, India

We believe in supporting the communities where we operate by building local ecosystems to enrich and create value. Our activities include industry and academic partnerships, and community development initiatives. We are passionate about sharing science and engineering with young people. We encourage our employees to engage in our programs, which support our sustainability strategy and are adapted to the local context.

Since 2012, we have measured our community involvement through the Business for Societal Impact (formerly London Benchmarking Group) methodology, a global standard to measure and manage corporate community investment. I 3-3 I

BUSINESS FOR SOCIETAL IMPACT
CORPORATE CITIZENSHIP

2022 achievements

In 2022, we implemented more than 660 community initiatives worldwide, a 27% increase from last year and double our 2020 figure. These included:

660+
community initiatives

- 37 sites in 23 different countries involved in community and education initiatives
- 148,000+ hours of Company time, representing 55% of the total contribution
- US$2.2 million in cash donations
- US$2.3 million in in-kind donations

The large increase in the number of community initiatives is largely due to the expansion of our 'STEM your way' program.

Other areas we supported include the ST Foundation, innovation, economic development, health, environment, and social welfare. In 2022, we organized a fundraising campaign for the Ukrainian Red Cross. Our employees raised over US$180,000, which was matched by ST.

To grow employee involvement with social and community activities, we acquired a digital platform in 2022 that will be rolled out in 2023. This tool will raise awareness of our events and facilitate donations and fundraising appeals.

STEM your way program

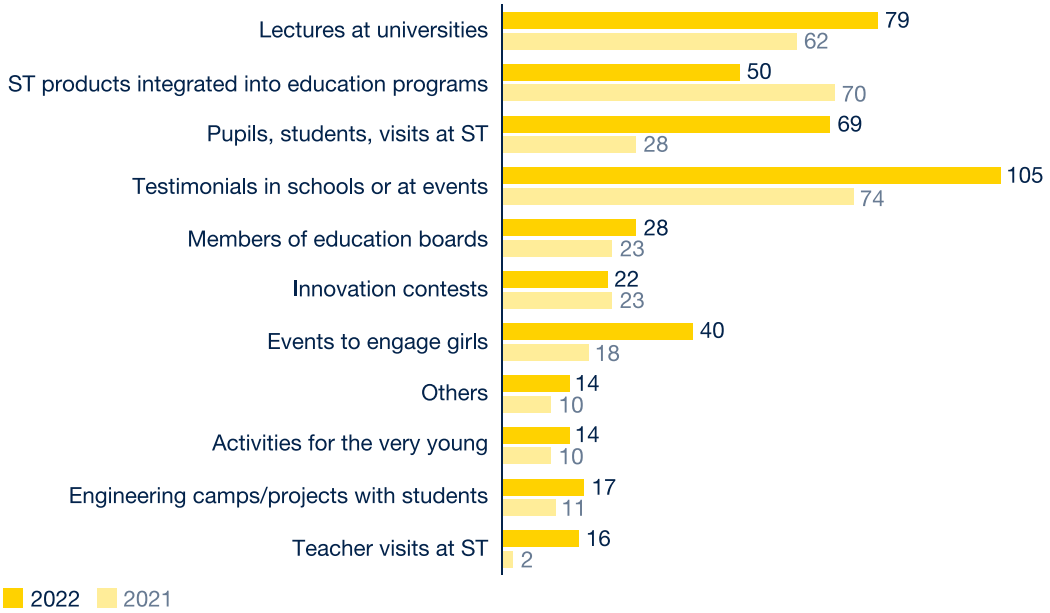
Science, Technology, Engineering, and Mathematics (STEM) education is increasingly considered to be indispensable. It can provide the tools needed to develop solutions to complex global problems and boost curiosity in young people. Our 'STEM your way' program raises awareness among young people about the importance of STEM subjects and inspires them to explore STEM-related careers.

100,000+

beneficiaries

In 2022, over 450 STEM events and initiatives reached more than 100,000 students and teachers, a 53% increase from 2021. The creation of a worldwide network of STEM champions and ambassadors has helped us accelerate our efforts.

Number of STEM initiatives



Starting young

We recognize the benefits of encouraging curiosity and creativity in children. Throughout the year, we significantly increased the number of events, including webinars, tours of our sites, and visits to schools, with dedicated hands-on activities enabling us to reach more children.

An important part of our program for schools is a project started in 2021 with **Vittascience**, a French startup specializing in educational tools.

Aimed at pupils and teachers in junior and secondary education, the project aims to raise interest in electronics and coding among young people. It uses educational kits to teach children to code. The kits are built with STMicroelectronics' electronic components and supported by the Vittascience digital platform.

We launched two new kits in 2022, a STM32 starter kit and an IoT sensor kit, adding to the existing Martian robot and connected plant kits. The digital platform for programming the kits is available in English, French, Italian, and Arabic.

These educational kits were jointly funded by ST and the Important Projects of Common European Interest (IPCEI) for Microelectronics program.

Our site in Tunis (Tunisia) has done further work to design and develop hands-on materials for young pupils to complement the educational kits. The site has also held discussions with the Tunisian National Education Authority about the use of Vittascience kits in schools.

Higher education

At university level, we support students with our expertise and help to equip them with skills for their future careers. Our technical experts are involved in developing new curricula, building content, delivering courses and training teachers to prepare students for the world of work.

Our programs have grown significantly in France, Italy and China, and we are building on this with new activities in the USA and India.

In the USA, we partnered with ARM and the EdX education platform to offer online learning courses on ST products: 'Build your first IoT application with ARM' and 'Machine learning at the edge', with both courses using an STM32 IoT Discovery board (see **Educational Platforms on www.st.com**). More than 10,000 students attended these courses in 2022.

In India, we organized the second edition of the Annual Faculty Development Program workshop in partnership with the All India Council for Technical Education, ARM Education, Microsoft, and the National Institute of Electronics and Information Technology. This event, which was attended by over 8,000 participants, aimed to equip faculty members, academics, educators, researchers, and industry practitioners with further knowledge of IoT and AI/machine learning technologies.

In addition to the programs run by our major sites, our small and medium-sized sites are also highly involved in their local ecosystems. Our site in Tunis (Tunisia), for example, has been collaborating with local universities since 2001 to develop the local education ecosystem. At present, almost 80% of Tunisian universities are involved in this collaboration.

STEM for girls

We believe our industry needs more diverse talent to create a better future. Our role in combating gender stereotypes in science and technology is a key focus of our initiatives in this area.

In 2022, we organized 40 events dedicated to enhancing diversity in STEM that reached nearly 7,000 students globally. Italy was particularly active, engaging with more than 1,700 teenagers. In addition to this, our Singapore site reached around 13,700 beneficiaries through a social media campaign on Instagram 'A Day in the Life at Work' showing short videos of women in STEM jobs.

In Singapore, we have been working with a partner, United Women Singapore, on a program called Girls2Pioneers. Key initiatives included STEM outreach activities in schools and shelters and an inaugural STEM mentorship program.

Georgette Tan
President United Women Singapore

United Women Singapore (UWS) is proud to work closely with ST to encourage and inspire girls and young women to pursue STEM careers. ST partnered with UWS for several milestone projects through our Girls2Pioneers STEM program and supported the launch of our 'Close the skills gap: STEM To STEAM' research. Thanks to this partnership and ST's commitment towards closing the STEM gender gap, more girls and young women are being empowered to build their future in STEM."

Our employees are involved in these activities as both mentors and facilitators. Members of our Women in Leadership community act as role models to participants, speak at webinars and participate in social media campaigns, inspiring women and girls to be confident about their future roles in STEM.

We continued to expand our programs in 2022 by organizing a series of webinars on the theme 'Break the bias in STEM' to encourage young female students to pursue STEM studies.

FOCUS

BREAK THE BIAS IN STEM

To celebrate International Women's Day in March 2022, we organized a series of international webinars and meetings called 'Break the bias in STEM'. The events addressed prejudice related to women's roles and contribution to science and technology, with the aim of encouraging girls to pursue STEM studies.

In total, 77 of our STEM ambassadors discussed their studies and careers to help break down stereotypes. Key messages were shared to encourage girls to be independent and confident in their career choices and to foster a passion for the field. The closing session of the series was open to all ST employees, providing the opportunity to recruit new STEM ambassadors. The series was conducted in 10 different languages across 15 countries. It reached over 1,400 students, teachers, and academics.

The success of this initiative led us to formalize 'Break the bias in STEM' as an annual global event. This will help us foster diversity and inclusion and strengthen our impact in the long-term.

ST Foundation

The mission of the ST Foundation (see **www.stfoundation.org**) is to develop, coordinate, and sponsor projects that use modern sciences to promote progress and sustainable development in less privileged communities worldwide.

970,000+

people trained since 2003

The ST Foundation's flagship Digital Unify (DU) program, launched in 2003, has trained over 970,000 people in 28 countries since its inception.

In 2022, after two years of lockdowns and DU lab closures, the program resumed in every country. Over 110,000 students took part in a diverse range of courses to improve their computer skills. An introduction to a computer basics course for visually impaired people was launched in Senegal with great success. It serves as a starting point for reaching a community that is strongly disadvantaged in our increasingly digital world.

To achieve its aims, the ST Foundation receives a wide range of support from ST. In 2022, this included:

- a cash donation of US$1 million
- the appointment of two full-time people to manage the Foundation's activities in France and Italy
- electronic and IT equipment
- time devoted by employees to developing new courses or to support the DU program, especially Italian, Indian and Filipino volunteers
- support from the Corporate External Communication team to maintain the Foundation's website and produce its activity report for external stakeholders

In 2022, ST volunteers in Italy helped to develop a new coding course to support elementary and secondary school students with creativity and problem-solving skills, using coding to combat digital education poverty.

Contributing to the Sustainable Development Goals

Our commitments and programs as described above contribute to:

SDG target 4.3 – Ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.

SDG target 10.2 – Empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.

2025 sustainability goal	Status	Comments
SG6: Engage employees in deploying STEM partnerships in 20 countries by 2025.		12 out of 20 countries*

* China, Czech Republic, France, India, Italy, Malaysia, Morocco, Singapore, Switzerland, Tunisia, UK, USA

Community indicators

This section includes indicators and GRI Standard disclosures.

Supplier agreement to comply with ST business ethics and corporate responsibility standards[1] (%)

	2018	2019	2020	2021	2022
Supplier agreement	65	79	89	93	**91**

[1] Percentage of total number of suppliers.

Number of suppliers and facilities at risk for sustainability[1] I 308-2 I 414-2 I

		2018	2019	2020	2021	2022
Direct procurement						
Material suppliers	Suppliers	96	87	89	103	**84**
	Facilities	242	237	240	277	**227**
Back-end subcontractors	Suppliers	28	26	28	26	**29**
	Facilities	45	39	40	54	**55**
Front-end subcontractors	Suppliers	12	7	6	11	**12**
	Facilities	17	18	14	23	**24**
Indirect procurement						
Equipment/spare-parts suppliers	Suppliers	74	80	58	59	**38**
	Facilities	102	94	75	85	**52**
Local service providers & labor agencies	Suppliers	200	252	154	177	**177**
	Facilities	NA	NA	NA	NA	**NA**
Total suppliers		**410**	**452**	**335**	**376**	**340**
Total facilities		**606**	**640**	**523**	**616**	**535**

[1] According to social, ethics and EHS criteria.
NA = not applicable

Suppliers' and subcontractors' Environmental, Health & Safety performance[1] (%)

	2018	2019	2020	2021	2022
ISO 14001 certified/EMAS validated					
Material suppliers	82	97	97	88	**96**
Equipment/spare-parts suppliers	5[2]	44	50	52	**50**
Back-end subcontractors	96	96	96	96	**97**
Front-end subcontractors	100	100	100	100	**91**
Overall	**58**	**76**	**82**	**79**	**85**
ISO 45001 validated					
Material suppliers	48	56	58	55	**58**
Equipment/spare-parts suppliers	1[2]	14	10	14	**11**
Back-end subcontractors	72	75	61	66	**78**
Front-end subcontractors	67	78	80	80	**73**
Overall	**36**	**43**	**45**	**46**	**53**

[1] For the number of eligible suppliers see the table 'Number of suppliers and facilities at risk for sustainability'.
[2] Issue with data consolidation in 2018.

Step 1 – supplier agreement to comply with RBA code or equivalent[1,2]

	2018	2019	2020	2021	2022
Direct procurement					
Material suppliers	89	79	82	102	**82**
Back-end subcontractors	25	26	27	23	**29**
Front-end subcontractors	12	7	6	10	**12**
Indirect procurement					
Equipment/spare-parts suppliers	66	68	54	55	**37**
Local service providers & labor agencies	194	240	151	149	**176**
Total	**386**	**420**	**320**	**339**	**336**

[1] For the number of eligible suppliers see the table 'Number of suppliers and facilities at risk for sustainability'.
[2] Number of suppliers who have signed a commitment to the current version of the RBA code of conduct or equivalent, and accept to complete assessments and audits.

Step 2 – supplier CSR self-assessment questionnaires[1,2] (SAQ) I 308-2 I 414-2 I

	2018	2019	2020	2021	2022
Direct procurement					
Material suppliers	215	197	214	257	**205**
Back-end subcontractors	43	34	34	44	**35**
Front-end subcontractors	17	16	14	20	**20**
Indirect procurement					
Equipment/spare-parts suppliers	74	82	70	82	**48**
Local service providers & labor agencies	110	82	99	31	**86**
Total	**459**	**411**	**431**	**434**	**394**

[1] For the number of eligible facilities see the table 'Number of suppliers and facilities at risk for sustainability'.
[2] Completed at facility level.

Step 3 – supplier CSR audits[1,2,3] | 308-2 | 414-2 |

	2018	2019	2020	2021	2022
Direct procurement					
Material suppliers	4	5	12	21	**23**
Back-end subcontractors	3	9	4	14	**9**
Front-end subcontractors	7	3	6	3	**8**
Indirect procurement					
Equipment/spare-parts suppliers	1	0	5	5	**6**
Local service providers & labor agencies	26	32	66	36	**70**
Total	**41**	**49**	**93**	**79**	**116**

(1) For the number of eligible facilities see the table 'Number of suppliers and facilities at risk for sustainability'.
(2) Completed at facility level.
(3) Either official third-party RBA audit or ST verification based on RBA audit protocol (audits are valid for 2 years).

Supplier facilities average RBA SAQ score[1] (%)

	2018	2019	2020	2021	2022
Health and safety section	90.7	90.3	89.6	89.4	**90.1**
Environment section	88.0	88.6	85.8	84.4	**87.2**
Labor section	91.1	91.7	91.7	90.9	**91.3**
Ethics section	93.1	94.0	93.4	91.3	**93.1**
Overall average	**90.5**	**91.0**	**90.1**	**89.1**	**89.7**

(1) Key suppliers' facilities (material, equipment/spare-parts suppliers, subcontractors).

Average number of findings per supplier audit

	2020	2021	2022
Direct procurement			
Priority non-conformances	0.23	0.18	**0.45**
Major non-conformances	3.50	4.84	**4.08**
Closure rate[1]	–	40%	**38%**
Indirect procurement			
Priority non-conformances	0.06	0.22	**0.17**
Major non-conformances	1.56	3.54	**1.89**
Closure rate[1]	–	83%	**87%**

(1) Percentage of priority and major non-conformances closed during the year.

Recruitment fees reimbursed to workers by suppliers | 409-1 | SDG 8.7

	2020	2021	2022
Total amount of fees paid back (US$)	29,852	137,651	**248,153**
Number of impacted workers	22	42	**220**
Number of suppliers involved	3	4	**2**

Supplier RBA training and awareness in 2022

Number of supplier[1] companies reached	**222**
Number of supplier employees[1] reached	**1,733**

(1) Suppliers and employees are counted for each training, so the same suppliers and employees may be counted several times.

Suppliers terminated as a result of a negative social or environmental impact | 308-2 | 414-2 | SDG 8.7

	2018	2019	2020	2021	2022
Number of suppliers	2[1]	1[2]	1[3]	1[4]	**2[5]**

(1) Recruitment fees and detention of employee passports in a cleaning service supplier; and recruitment fees and levy deduction with a security service supplier in Muar site (Malaysia).
(2) Legal requirement concerning social contributions not respected by a cleaning services company in Tunis site (Tunisia).
(3) Contract not renewed with a security service supplier in Bouskoura (Morocco) due to excessive working hours.
(4) Non-payment of social security contributions for its employees in Marcianise site (Italy).
(5) Material supplier with risk of forced labor in subtiers (Japan); canteen service provider failing to comply with laws and regulation in Muar site (Malaysia).

Conflict minerals inquiry results in 2022 SDG 8.7

	Gold	Tantalum	Tin	Tungsten
Number of smelters	98	34	58	39
Smelters which are RMAP[1] validated (%)	100%	100%	100%	100%
Smelters which are active in the RMAP[1] but were not RMAP validated as of December 31, 2021 (active smelters) (%)	0%	0%	0%	0%
Active smelters which have declared sourcing from L1/L2[2] countries or recycled or scrap sources[3] (%)	0%	0%	0%	0%
Active smelters which have not provided a declaration regarding country or origin of recycled or scrap sources (%)	0%	0%	0%	0%

(1) Responsible Minerals Assurance Process (formerly Conflict Free Smelter Program).
(2) Level 1 countries are not identified as conflict regions or plausible areas of smuggling or export from the Democratic Republic of the Congo and its nine adjoining countries.
Level 2 countries are known or plausible countries for smuggling, export out of region or transit of materials containing tantalum, tin, tungsten or gold.
(3) Based on information presented by suppliers and subcontractors.

Community involvement – inputs | 201-1 |

	2018	2019	2020	2021	2022
Number of community involvement initiatives[1]	374	389	340	520	**661**
Total contribution (evaluated in US$m)	8.0	7.9	10.4	8.9	**11.1**

(1) Multiple activities linked to the same program count as one initiative.

Geographical spread of community contributions[1] (%)

	2018	2019	2020	2021	2022
Africa	10	2	1	2	**2**
Americas	0	0	0	3	**3**
Asia	16	11	11	11	**7**
Europe	57	73	76	69	**69**
Worldwide	17	14	12	16	**19**

(1) The sums may not add up to 100% due to rounding of the figures.

Community contribution[1]

	2018	2019	2020	2021	2022
Cash donations (%)	15	23	21	15	**20**
Staff time volunteering (%)	75	66	43	68	**55**
In-kind (%)	7	9	34	15	**20**
Management costs (%)	2	2	2	2	**5**
Number of employees engaged in volunteering[2]	5,663	6,065	4,231	4,620	**6,648**
Number of hours contributed inside Company time	124,154	145,498	114,324	138,305	**148,300**

(1) The sums may not add up to 100% due to rounding of the figures.

(2) Employees are counted for each initiative, so the same employee may be counted several times.

Reason for community contribution[1] (%)

	2018	2019	2020	2021	2022
Community investment	97	97	64	96	**96**
Charitable donation (gift)	3	3	36	4	**4**
Commercial initiative	0	1	0	0	**1**

(1) The sums may not add up to 100% due to rounding of the figures.

Community involvement – outcomes

	2018	2019	2020	2021	2022
Number of beneficiary organizations	1,384	1,856	2,938	3,111	**3,849**
Number of direct beneficiaries	103,703	117,136	163,497	132,004	**228,563**

Direct beneficiary groups[1] (%)

	2018	2019	2020	2021	2022
Children/Teenagers	8	9	3	6	**7**
Students/Scientific communities	79	77	53	82	**75**
Affected by natural/man made disaster[2]	–	–	32	3	**0**
Local population	8	8	7	7	**16**
Senior/Elderly people	–	1	4	0	**0**
Others[3]	4	3	2	2	**2**

(1) The sums may not add up to 100% due to rounding of the figures.

(2) Mainly linked to COVID-19 pandemic.

(3) Includes people on low incomes/unemployed, people with poor health, migrants and disabled people.

Key data

EU Taxonomy

The EU Taxonomy Regulation

On July 12, 2020, EU Regulation 2020/852 of the European Parliament and of the Council of June 18, 2020 (the 'EU Taxonomy Regulation') entered into force. The EU Taxonomy Regulation establishes the basis for a classification system to determine which economic activities can be considered environmentally sustainable. The EU Taxonomy Regulation is part of the EU's overall efforts to reach the objectives of the European Green Deal, Europe's strategy towards climate neutrality in 2050. The EU Taxonomy Regulation is designed as a transparency tool to help companies and investors make sustainable investment decisions, with the overall purpose to steer financing towards more sustainable economic activities. Pursuant to the EU Taxonomy Regulation, we are required to disclose information on how and to what extent our activities qualify as environmentally sustainable. The EU Taxonomy Regulation effective as per reporting year 2021 is relatively new legislation and includes additional reporting obligations as of financial year 2022. The EU Taxonomy Regulation is implemented in phases and will further develop over the coming years. Consequently, disclosure obligations under the EU Taxonomy Regulation will enter into force in multiple phases.

Environmental objectives

The EU Taxonomy Regulation defines overarching conditions which an economic activity must meet to be considered environmentally sustainable and focuses on six environmental objectives, being (i) climate change mitigation, (ii) climate change adaptation, (iii) the sustainable use and protection of water and marine resources, (iv) the transition to a circular economy, (v) pollution prevention and control and (vi) the protection and restoration of biodiversity and ecosystems. For these environmental objectives, several delegated acts will be issued containing technical screening criteria ('Taxonomy technical screening criteria'), which specify environmental performance requirements for the economic activities to be classified as environmentally sustainable ('EU Taxonomy Delegated Acts').

On January 1, 2022, the EU Taxonomy Delegated Act on climate change mitigation and climate change adaptation entered into force. No delegated acts have currently entered into force for the other four environmental objectives.

Eligibility and alignment

As a non-financial undertaking we have to disclose information on our economic activities which are eligible ('Taxonomy-eligible') and aligned ('Taxonomy-aligned') under the EU Taxonomy Regulation for financial year 2022.

An economic activity can be considered Taxonomy-eligible when the economic activity is described as such in the relevant EU Taxonomy Delegated Act. To assess whether the relevant economic activity can also be considered Taxonomy-aligned, an additional evaluation must be made to identify if the overarching Taxonomy technical screening criteria are met.

Applicability of the EU Taxonomy Regulation to ST

As we are subject to an obligation to publish non-financial information pursuant to the Directive 2013/34/EU of the European Parliament and of the Council of June 26, 2013 (the Non Financial Reporting Directive, 'NFRD'), the EU Taxonomy Regulation is applicable to us, and subsequently, we must disclose information on how and to what extent our economic activities are associated with economic activities that qualify as environmentally sustainable under the EU Taxonomy Regulation.

For financial year 2022 in relation to climate change mitigation and climate change adaptation, we hereinafter include disclosure of: (i) Taxonomy-eligible and Taxonomy-aligned economic activities, (ii)

Taxonomy-eligible and Taxonomy-non-aligned economic activities, and (iii) Taxonomy non-eligible economic activities within our turnover, capital expenditure and operating expenditure.

The following disclosures pursuant to the EU Taxonomy Regulation are based on the most recent interpretations of the EU Taxonomy Regulation as published by the European Commission. Acknowledging that the EU Taxonomy Regulation is still under development and its interpretation and application is evolving, our approach to disclosure under the EU Taxonomy Regulation might consequently evolve accordingly.

Environmentally sustainable activities

Under the EU Taxonomy Regulation an economic activity is considered environmentally sustainable ('EU Taxonomy-aligned') if it meets the following conditions:

1. provides a substantial contribution to one of the six abovementioned environmental objectives by complying with Taxonomy technical screening criteria;
2. does not significantly harm any of the other environmental objectives (i.e. does not support one environmental objective at the expense of progress on another environmental objective) ('DNSH'); and
3. complies with internationally recognized minimum safeguards (e.g. OECD Guidelines for Multinational Enterprises, UN Guiding Principles on Business and Human Rights) ('MSS').

We assessed our economic activities against the EU Taxonomy Regulation classification system in various steps, amongst others: (i) identifying the economic activities relevant for the EU Taxonomy Regulation disclosure, (ii) performing a Taxonomy-eligibility assessment based on the relevant EU Taxonomy Delegated Act, and (iii) assessing Taxonomy-alignment of the economic activities. For the disclosure of Taxonomy-eligibility and Taxonomy-alignment we assessed the proportion of our turnover, capital expenditure and operating expenditure, related to environmentally sustainable activities.

Enabling economic activity

We believe that the semiconductor industry plays a key role as a strategic enabler of a low carbon society as well as to manage the transition towards carbon neutrality. As part of our value proposition, we aim at designing and manufacturing products that are power efficient and support our customers in developing technologies that have low carbon footprint. Low carbon applications such as electric mobility, renewable energies, smart cities, or smart building have been and remain strategic markets for us. We are a market leader in the design and manufacturing of power solutions and motor control enabling products, in which there are ample opportunities for short-term impact on greenhouse gas emissions. We are also a market leader in terms of ultra-low power ICs such as sensors or microcontrollers (see ***ST* process and packaging technologies**, **ST products and solutions**; **Sustainable technology**)

While some sectors contribute directly to climate change mitigation and climate change adaptation, we, as an intermediate product manufacturer, enable 'the manufacturing of low-carbon technologies', which activity is also covered by the EU Taxonomy Regulation classification system. Our activities which aim at contributing to climate change mitigation and climate change adaptation, are the manufacturing of electronic components that enable other sustainable economic activities and applications. The relevant EU Taxonomy Delegated Act lists economic activities that may be considered Taxonomy-eligible based on associated so-called NACE codes. For our Taxonomy-eligibility we report on NACE code 26: 'Manufacture of computer, electronic and optical products'; and NACE code 26.11: 'Manufacture of electronic components'. NACE code 26.11 is considered relevant for the semiconductor market as confirmed in the guidance published on the interpretation of the EU Taxonomy Regulation by the European Commission in October 2022. For financial year 2022 we therefore report under section 3.6 of the EU Taxonomy Delegated Act on Manufacture of low carbon technologies.

Our EU Taxonomy-eligibility assessment

In our Taxonomy-eligibility assessment we identified all our products, which aim at contributing substantially to climate change mitigation. These products are divided into the following four product categories: (i) products that have a low carbon manufacturing footprint compared to similar products of a previous generation, (ii) products that have low power consumption or low power loss

characteristics compared to similar products manufactured by us or others, (iii) products that bring an advantage to run a low greenhouse gas emission end application or (iv) products that bring an advantage to improve efficiency of high greenhouse gas emitting end applications.

With regard to climate change adaptation, we constantly assess how our products could contribute to climate change adaptation and potentially qualify under the relevant EU Taxonomy criteria. Capital expenditure related to the implementation of climate change adaptation solutions is less than 1% of our total capital expenditure as reported in Notes 7.6.11, 7.6.12 and 7.6.13 of our consolidated financial statements for the year ended December 31, 2022 (see Annual and semi-annual reports – STMicroelectronics NV on **www.st.com**)

EU Taxonomy reporting – Taxonomy-eligible economic activities related to climate change mitigation

Our approach towards application of the EU Taxonomy Regulation for the relevant KPIs: turnover, capital expenditure and operating expenditure for EU Taxonomy reporting purposes is reflected below.

Turnover of Taxonomy-eligible economic activities

In our Taxonomy-eligibility assessment all our product lines have been reviewed. Products falling into one of the four product categories referenced above are considered Taxonomy-eligible and we have included the relevant turnover generated from those products in the Taxonomy turnover calculation.

This assessment resulted in a turnover of Taxonomy-eligible economic activities amounting to 38% of our total revenues reported for the financial year 2022, whereby the denominator is based on our total revenues as reported on the consolidated income statement for the year ended December 31, 2022, while the numerator is based on the total net turnover of our products considered as Taxonomy-eligible.

Capital expenditure of Taxonomy-eligible economic activities

To determine the Taxonomy-eligible portion of our capital expenditure the following has been taken into account:

- investments in our technologies, which have been directly associated with Taxonomy-eligible product lines based on our capital expenditure plan for each technology
- individual measures, such as investments for our carbon neutrality program or investments related to energy efficiency of our processes
- investments related to IP or licenses or capitalized development costs, which have been classified as Taxonomy-eligible based on the relevant product line or technology, and
- lease of buildings and equipment which have been considered as fully or partially Taxonomy-eligible

For determining the Taxonomy-eligible portion of the capital expenditure, the denominator is determined based on the 2022 additions to property, plants and equipment (including rights of use for leased assets), intangible assets (including capitalized development costs), as reported in Notes 7.6.11, 7.6.12 and 7.6.13 of our consolidated financial statements for the year ended December 31, 2022 (see Annual and semi-annual reports – STMicroelectronics NV on **www.st.com**)

Furthermore, the numerator is determined by capital expenditure (including IFRS 16 leases) related to assets or processes that (i) are associated with Taxonomy-eligible economic activities, (ii) are part of a capital expenditure plan to expand Taxonomy-eligible economic activity, and (iii) are individual measures enabling economic activities to become low-carbon or to lead to greenhouse gas reduction.

This results in a capital expenditure of Taxonomy-eligible economic activities amounting to 46% of our total capital expenditure for the financial year 2022.

Operating expenditure of Taxonomy-eligible economic activities

For determining the operating expenditure of Taxonomy-eligible economic activities, the denominator is determined based on R&D expenses, as reported in our consolidated income statement for the year ended December 31, 2022, after deducting depreciation and amortization, certain expenses and overheads, which are not directly associated with the development of new products or technologies.

Furthermore, the numerator equals to the part of the operating expenditure included in the denominator that is any of the following: (a) related to assets or processes associated with Taxonomy-eligible economic activities, (b) part of the capital expenditure plan to expand Taxonomy-eligible economic activities. For the numerator, we reviewed each R&D project with the following approach:

- each R&D project linked to a product line classified as Taxonomy-eligible resulted in Taxonomy-eligible operating expenditure
- each R&D project linked to a technology classified as Taxonomy-eligible resulted in Taxonomy-eligible operating expenditure, and
- for the remaining and most material R&D projects serving multiple product lines or technologies, we applied relevant allocation keys taking into account, amongst others, the abovementioned Taxonomy-eligible portion of our turnover

This assessment results in operating expenditure of Taxonomy-eligible economic activities amounting to 35% of our total operating expenditure for the financial year 2022.

EU Taxonomy Regulation reporting – Taxonomy-aligned activities related to climate change mitigation

As mentioned above, Taxonomy-alignment implies that the economic activities comply with the following three conditions:

- providing a substantial contribution to one of the six environmental objectives by complying with the Taxonomy technical screening criteria;
- complying with the DNSH criteria; and
- complying with the minimum safeguards criteria.

Substantial contribution

Turnover of environmentally sustainable (Taxonomy-aligned) economic activities

To verify to what extent the turnover is aligned according to the Taxonomy technical screening criteria of the 'Substantial contribution to climate change mitigation' from EU Taxonomy Regulation, we apply the principles of the described activity as reflected under 3.6 'Manufacture of other low carbon technologies': 'the economic activity manufactures technologies that are aimed at and demonstrate substantial life-cycle greenhouse gas emission savings compared to the best performing alternative technology/product/solution available on the market'.

In the case of semiconductors, the greenhouse gas reduction can come from both products (supply, manufacturing, end of life) as from contributions to application impact (usage). Therefore, we have adopted a combined approach to reflect this duality. Firstly, for all our product lines classified as Taxonomy-eligible on the basis of their low power consumption characteristics or the low manufacturing footprint criteria, life-cycle greenhouse gas emissions have been calculated on a representative sample basis and compared to either a previous generation of products made by us or to a similar product made by others as an external reference. As a result, certain products have been excluded from our turnover calculation. In addition, a second assessment has been performed at application level, aiming at qualifying our substantial contribution. We have considered an application classification to reflect the overall impact of the semiconductor on the electricity consumption of the application, hence its implied greenhouse gas emissions. We selected the turnover of our product lines ending in applications considered, as either low greenhouse gas

emitting applications (e.g. electric vehicle) or high greenhouse gas emitting but transitional applications (e.g. data center servers), on the basis of the high impact of the semiconductor in the reduction of greenhouse gas emissions during the operating lifetime of the applications.

Capital expenditure of environmentally sustainable (Taxonomy-aligned) economic activities

A similar approach as for Taxonomy-eligibility has been adopted to determine the Taxonomy-alignment of our capital expenditure and consistent with the approach defined for the Taxonomy-alignment of the turnover. Notably for the main category related to the investment in our technologies, where the investment supporting product lines aligned as per the turnover approach were included i.e. the ones bringing a key advantage to low or transitional greenhouse gas emitting end applications.

An allocation key derived from the proportion of our aligned investment was applied to building and equipment, and other capital expenditure not directly linked to a product line or a technology.

Operating expenditure of environmentally sustainable (Taxonomy-aligned) economic activities

A similar approach as for Taxonomy-eligibility has been adopted to determine the Taxonomy-alignment of operating expenditure, and consistent with the approach defined for the Taxonomy-alignment of the capital expenditure. Substantial contribution was determined by either associating the R&D project with a product line or a technology classified as Taxonomy-aligned, or by applying a relevant ratio of aligned turnover.

Do No Significant Harm (DNSH)

The second pillar of our approach to Taxonomy-alignment relates to the demonstration that our economic activity does no significant harm to the other five environmental objectives included in the EU Taxonomy Regulation:

- climate change adaptation
- sustainable use and protection of water and marine resources
- pollution prevention and control regarding use and presence of chemicals
- protection and restoration of biodiversity and ecosystems, and
- circular economy

For each environmental objective, we have designed templates to approach the various sub-criteria in a consistent manner across our activities. Only the pollution prevention and control regarding use and presence of chemicals' objective resulted in the identification of product lines which were not compliant and had a direct negative impact on the Taxonomy-aligned turnover, capital expenditure and operating expenditure KPIs.

Climate change adaptation

We performed a climate risk and vulnerability assessment together with an external provider to ensure that climate projections are based on state-of-the-art science compared to two scenarios set out by the United Nations Intergovernmental Panel on Climate Change, as required under this DNSH criterion. This assessment covers all relevant ST and partner sites and features a risk analysis (projected evolution of physical risks (natural hazards)) as well as an overall vulnerability assessment (aggregated 'peril score' compiling the overall multi-natural-hazard exposure to future climate). The detailed results (with site specific areas of focus) were communicated to all relevant stakeholders at the sites and corporate levels. Priority sites were identified based on the peril score. These sites provided a view on existing climate change adaptation efforts based on their exposure and are currently working on a more detailed roadmap in terms of climate change adaptation (see **Energy and climate change**).

The outcome of this analysis confirmed our compliance with the DNSH criterion in connection with climate change adaptation.

Sustainable use and protection of water and marine resources

We have completed an environmental assessment for all our manufacturing sites and main R&D centers and have a view at site and corporate levels on the risks associated with the preservation of the water quality and the prevention of water stress. As part of our environmental processes, we have actions plan in place to address the risks identified to ensure that deterioration is avoided (see **Water**).

All our manufacturing sites and several of our key sites of R&D are ISO 14001 certified for our environmental management system. Most manufacturing and R&D sites are EMAS certified (see Certification table in **Business indicators**).

The outcome of this analysis confirmed our compliance with the DNSH criterion in connection with sustainable use and protection of water and marine resources.

Pollution prevention and control regarding use and presence of chemicals

Managing chemical substances and materials used in our manufacturing sites is critical for protecting people, preserving the environment, and complying with legal and customer requirements. Accordingly, for all materials including chemicals and gases entering at any of our sites, a site chemical committee authorizes the use and evaluates the best management solutions, both for new processes and modification of existing processes. In addition, since 1996 we have defined our environment, health and safety regulated substances list detailing the substances for which use is prohibited and those for which use is restricted to selected applications only and/or is subject to strict measures (see **Chemicals**).

The review performed for the DNSH assessment was done at substance level in order to evaluate if our activities do not lead to the manufacture, placing on the market or use of the listed substances as reflected in the relevant DNSH criteria following from the EU Taxonomy Delegated Act. For each of the requirements following from the DNSH criteria a detailed evaluation was carried out comparing the requirements to the current situation in our manufacturing sites and subcontracted manufacturing activities. This analysis included an assessment of the codified raw materials delivered to all our sites.

If materials have been identified as containing one or more listed substances in Annex II of the RoHS Directive (Directive 2011/65/EU) and or in the Reach (Regulation 1907/2006) SVHC candidate list or Annex XVII or Annex XIV, or in Article 57 of REACH the relevant manufacturing processes or products have been identified. Associated revenues were consequently excluded as they cannot qualify for alignment, in absence of further guidance. This process was performed at product line enabling consistency with the approach taken for the turnover.

We experienced challenges in the application of the specific criteria for the exception on the basis of the concept of ‘essential use for the society’. The lack of clarity on this concept has resulted in us approaching this assessment in a conservative way to avoid that products would potentially unjustified be considered Taxonomy-aligned. As a result we have not defined nor used the concept of ‘essential use for the society’ criteria despite our role in the energy transition notably for electric vehicle components and therefore have excluded certain products from this assessment. We did include chemicals benefiting from an RoHS exemption and which chemicals are also subject to (f) and (g) of the relevant DNSH criteria following from the EU Taxonomy Delegated Act where no technical alternative exists.

The outcome of this analysis confirmed that most of our product lines are compliant with the EU Taxonomy Regulation. However, part of our turnover was excluded notably due to the use of substances of very high concern. Alternatives are constantly being further investigated in our manufacturing processes or products. This may result in adjustment of this assessment and related reporting in the future.

Consistent with the approach defined for the turnover, the investment supporting product lines not compliant with DNSH on pollution prevention were excluded from the Taxonomy-alignment of the capital expenditure and any R&D project linked to a product line not compliant as per the DNSH on pollution prevention was excluded from the Taxonomy-alignment of the operating expenditure.

Protection and restoration of biodiversity and ecosystems

We have completed an environmental assessment for all our manufacturing sites and main R&D centers. All the sites have put in place policies on the impact of their activities on the environment and maintain a system to monitor and manage such impact. In addition, we commissioned a specific study from an external provider to provide an assessment on the biodiversity and ecosystems in the areas close to our sites and operations. Fifteen sites were assessed from our front-end and back-end activities, along with three R&D and design centers. To date, several initiatives have been carried out to protect biodiversity of the areas around our sites (e.g. low mowing or insect hotels). Certain sites have defined biodiversity targets and started the evaluation of the diversity of species in their vicinity. (see **Our approach to the environment**).

Based on the outcome of the specific biodiversity and ecosystems study, ongoing efforts are taken at our sites to assess enhanced potential mitigation measures to further protect the environment.

The outcome of this analysis confirmed our compliance with the DNSH criterion in connection with protection and restoration of biodiversity and ecosystems.

Circular economy

We have deployed several actions to promote the reuse and use of secondary raw materials and reused components in manufactured products. Our recycling solution for silicon for example allows avoiding extraction and transportation of silicon. Furthermore, our scrap of silicon is valorized in a foundry where when added to aluminum it is then used in automotive, aeronautics and solar panel manufacturing.

Our waste management process prioritizes recycling over disposal, in the manufacturing process. Action plans have been defined at site level to increase the recycling rate. These actions are verified during RBA, ISO 14001 or EMAS audits. First actions have been implemented to reduce the packaging, then the remaining waste is compressed and recycled. Several initiatives are in place, for example, some of our wafers and frame packing are returned to suppliers and reused by them, or our carton waste resulting from material packaging is sent for recycling (see **Waste**).

Information on and traceability of substances of concern throughout the life cycle of the manufactured products are notably performed through material declaration forms. Our analysis as part of the DNSH pollution prevention also demonstrates our ability to identify the substance present in our processes or in products.

The outcome of this analysis confirmed our compliance with the DNSH criterion in connection with circular economy.

Minimum Safeguards

The last pillar of the Taxonomy-alignment assessment relates to the compliance with minimum safeguards. We have performed a detailed analysis of the following regulations: the OECD Guidelines for Multinational Enterprises, the United Nations Guiding Principles on Business and Human Rights, including the principles and rights set out in the eight fundamental conventions identified in the Declaration of the International Labour Organization on Fundamental Principles and Rights at Work and the International Bill of Human Rights. Our review also included the EU Charter of Fundamental Rights and the European Pillar of Social Rights. We expanded our analysis following the FAQ published by the European Commission in October 2022 and performed additional analysis on Corruption, Taxation and Fair competition criteria.

Our analysis was performed on our own operations based on internal audit (e.g. for taxation), procedures (e.g. corporate labor and human rights), programs (e.g. ST anticorruption program), policies (e.g. speak up policy) and our code of conduct in place. We also assessed our supply chain with a focus on subcontractors and high risk/strategic suppliers (according to the spend level, the scarcity of their product, and the availability of alternative sources) and other business relationships with a focus on our main customers which are RBA members. The analysis was performed and discussed with the relevant experts and senior level stakeholders within ST.

The outcome of this analysis confirmed our compliance with the minimum safeguards.

EU Taxonomy reporting tables

Proportion of turnover from products associated with Taxonomy-aligned economic activities – disclosure covering financial year 2022.

				Substantial contribution						DNSH (Do no significant harm)										
Economic activity	Codes	Absolute turnover	Proportion of turnover	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Minimum safeguards	Taxonomy-aligned proportion of turnover FY22	Taxonomy-aligned proportion of turnover FY21	Category of activity (Enabling)	Category of activity (transitional)
		USDm	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
A. Taxonomy Eligible activities																				
A1. Environmentally sustainable activities (Taxonomy aligned activities)																				
3.6 Manufacture of low carbon technologies	26.11	1,446	9%	100%	n.a					n.a	Y	Y	Y	Y	Y	Y	9%	n.a	E	
Total turnover Environmentally sustainable activities (Taxonomy aligned activities)		1,446	9%	100%	n.a					n.a	Y	Y	Y	Y	Y	Y	9%	n.a	E	
A2. Taxonomy eligible but not environmentally sustainable activities (not Taxonomy aligned activities)																				
3.6 Manufacture of low carbon technologies	26.11	4,669	29%							n.a	Y	Y	Y	N	Y	Y				
Total turnover of taxonomy eligible but not environmentally sustainable activities (not Taxonomy aligned activities)		4,669	29%							n.a	Y	Y	Y	N	Y	Y				
A1+A2		6,115	38%																	
B. Taxonomy non-eligible activities																				
Turnover of taxonomy non-eligible activities		10,013	62%																	
Total		**16,128**	**100%**																	

n.a = not applicable

Proportion of capital expenditure from products associated with Taxonomy-aligned economic activities – disclosure covering financial year 2022.

Economic activity	Codes	Absolute CapEx	Proportion of CapEx	Substantial contribution						DNSH (Do no significant harm)										
				Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Minimum safeguards	Taxonomy-aligned proportion of CapEx FY22	Taxonomy-aligned proportion of CapEx FY21	Category of activity (Enabling)	Category of activity (transitional)
		USDm	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
A. Taxonomy Eligible activities																				
A1. Environmentally sustainable activities (Taxonomy aligned activities)																				
3.6 Manufacture of low carbon technologies	26.11	524	12%	100%	0.0					n.a	Y	Y	Y	Y	Y	Y	12%	n.a	E	
Total CapEx Environmentally sustainable activities (Taxonomy aligned activities)		524	12%	100%	0.0					n.a	Y	Y	Y	Y	Y	Y	12%	n.a	E	
A2. Taxonomy eligible but not environmentally sustainable activities (not Taxonomy aligned activities)																				
3.6 Manufacture of low carbon technologies	26.11	1,489	34%							n.a	Y	Y	Y	N	Y	Y				
Total CapEx of taxonomy eligible but not environmentally sustainable activities (not Taxonomy aligned activities)		1,489	34%							n.a	Y	Y	Y	N	Y	Y				
A1+A2		2,013	46%																	
B. Taxonomy non-eligible activities																				
CapEx of taxonomy non-eligible activities		2,335	54%																	
Total		**4,348**	**100%**																	

n.a = not applicable

Proportion of operating expenditure from products associated with Taxonomy-aligned economic activities – disclosure covering financial year 2022.

				Substantial contribution						DNSH (Do no significant harm)										
Economic activity	Codes	Absolute OpEx	Proportion of OpEx	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Minimum safeguards	Taxonomy-aligned proportion of OpEx FY22	Taxonomy-aligned proportion of OpEx FY21	Category of activity (Enabling)	Category of activity (transitional)
		USDm	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	T
A. Taxonomy Eligible activities																				
A1. Environmentally sustainable activities (Taxonomy aligned activities)																				
3.6 Manufacture of low carbon technologies	26.11	137	10%	100%	n.a					n.a	Y	Y	Y	Y	Y	Y	10%	n.a	E	
Total OpEx Environmentally sustainable activities (Taxonomy aligned activities)		137	10%	100%	n.a					n.a	Y	Y	Y	Y	Y	Y	10%	n.a	E	
A2. Taxonomy eligible but not environmentally sustainable activities (not Taxonomy aligned activities)																				
3.6 Manufacture of low carbon technologies	26.11	330	25%							n.a	Y	Y	Y	N	Y	Y				
Total OpEx of taxonomy eligible but not environmentally sustainable activities (not Taxonomy aligned activities)		330	25%							n.a	Y	Y	Y	N	Y	Y				
A1+A2		467	35%																	
B. Taxonomy non-eligible activities																				
OpEx of taxonomy non-eligible activities		849	65%																	
Total		**1,316**	**100%**																	

n.a = not applicable

Future developments

There is currently limited guidance published on the interpretation of various elements of the EU Taxonomy Regulation. Despite the fact that we have carefully balanced our assessment and disclosures on the EU Taxonomy Regulation, taking into account that this first reporting year for the Taxonomy-alignment is considered to be a transitionary year, this reporting may differ from future disclosures as more guidance becomes available over time. Furthermore:

- turnover is based on best estimate to our knowledge and available data regarding our eligible and aligned products
- capital expenditure is based on best estimate to our knowledge and possible allocation of eligible and aligned products or technologies, and
- operating expenditure is based on best estimate to our knowledge and possible allocation of eligible and aligned products or technologies

In the coming years, we will continue to report under the EU Taxonomy Regulation regarding our Taxonomy-eligible economic activities as well as our Taxonomy-aligned economic activities. This entails a further and continuous review of our products, do no significant harm procedures and minimum safeguards assessment. Future guidance on the EU Taxonomy Regulation could result in updated definitions and other decision-making in meeting reporting obligations that may come into force notably related to the DNSH pollution prevention and control criteria or the definition of the operating expenditure. We expect that our reporting will evolve over time as more insights will be gained on how best to comply with the EU Taxonomy Regulation.

GRI content index

General Disclosures	Disclosure		Reference(s)/URL(s)
GRI 2: General Disclosures 2021	2-1	Organizational details	About this report › Page 2 ST at a glance › Page 4 Governance › Page 24
	2-2	Entities included in the organization's sustainability reporting	About this report › Page 2
	2-3	Reporting period, frequency and contact point	About this report › Page 2
	2-4	Restatements of information	About this report › Page 2
	2-5	External assurance	About this report › Page 2 Assurance statement › Page 164
	2-6	Activities, value chain, and other business relationships	Our business model › Page 6 ST process and packaging technologies › Page 8 ST products and solutions › Page 11 Sustainable financial performance › Page 47 Responsible supply chain › Page 128
	2-7	Employees	People indicators › Page 89
	2-8	Workers who are not employees	People indicators › Page 89
	2-9	Governance structure and composition	Supervisory Board on www.st.com
	2-10	Nomination and selection of the highest governance body	Supervisory Board on www.st.com Nominating and Corporate Governance Committee Charter, annex D on investors.st.com
	2-11	Chair of the highest governance body	Governance on www.st.com
	2-12	Role of the highest governance body in overseeing the management of impacts	Governance › Page 24 Supervisory Board on www.st.com Strategic Committee Charter, annex E on investors.st.com Managing Board and Executive Committee Charter on investors.st.com
	2-13	Delegation of responsibility for managing impacts	Governance › Page 24 Supervisory Board on www.st.com Nominating and Corporate Governance Committee Charter, annex D on investors.st.com Managing Board and Executive Committee Charter on investors.st.com
	2-14	Role of the highest governance body in sustainability reporting	Governance › Page 24 Sustainability Committee Charter, annex F on investors.st.com
	2-15	Conflicts of interest	Supervisory Board Charter on investors.st.com 2022 Annual report (Form 20-F) on investors.st.com (page 75)
	2-16	Communication of critical concerns	Ethics and compliance › Page 27
	2-17	Collective knowledge of the highest governance body	Supervisory Board Charter on investors.st.com
	2-18	Evaluation of the performance of the highest governance body	Supervisory Board Charter on investors.st.com
	2-19	Remuneration policies	Compensation policy for the Supervisory Board on investors.st.com Remuneration policy for the managing board on investors.st.com
	2-20	Process to determine remuneration	Compensation policy for the Supervisory Board on investors.st.com Remuneration policy for the managing board on investors.st.com General meeting of shareholders on investors.st.com
	2-21	Annual total compensation ratio	2022 Statutory Annual Report including IFRS Financial Statements on investors.st.com (pages 78 and 86)
	2-22	Statement on sustainable development strategy	Foreword by our President and CEO › Page 5
	2-23	Policy commitments	Ethics and compliance › Page 27 ST Code of Conduct on www.st.com/code_of_conduct Labor and Human Rights › Page 71 Corporate labor and human rights policy on www.st.com
	2-24	Embedding policy commitments	Ethics and compliance › Page 27
	2-25	Processes to remediate negative impacts	Ethics and compliance › Page 27

General Disclosures	Disclosure		Reference(s)/URL(s)
			ST Code of Conduct on www.st.com/code_of_conduct Misconduct reporting online on www.speakupfeedback.eu/web/stmicroelectronics
	2-26	Mechanisms for seeking advice and raising concerns	Ethics and compliance › Page 27 ST Code of Conduct on www.st.com/code_of_conduct Misconduct reporting online on www.speakupfeedback.eu/web/stmicroelectronics
	2-27	Compliance with laws and regulations	Ethics and compliance › Page 27 People indicators › Page 89 Environmental indicators › Page 123 2022 Annual report (Form 20-F) on investors.st.com (page 130)
	2-28	Membership associations	Involvement in Industrial and International Organizations on www.st.com
	2-29	Approach to stakeholder engagement	About this report › Page 2 Sustainability strategy › Page 37 Stakeholder engagement › Page 41
	2-30	Collective bargaining agreements	People indicators › Page 89

Material topics	Disclosure		Reference(s)/URL(s)
GRI 3: Material topics 2021	3-1	Process to determine material topics	Sustainability strategy › Page 37
	3-2	List of material topics	Sustainability strategy › Page 37
Sustainable financial performance			
GRI 3: Material topics 2021	3-3	Management of material topic	Sustainable financial performance › Page 47
GRI 201: Economic performance 2016	201-1	Direct economic value generated and distributed	Our business model › Page 6 Business indicators › Page 64 People indicators › Page 89 Community indicators › Page 143 2022 Annual report (Form 20-F) on www.st.com (page 7)
Energy & climate change			
GRI 3: Material topics 2021	3-3	Management of material topic	Energy and climate change › Page 101
GRI 302: Energy 2016	302-1	Energy consumption within the organization	Environmental indicators › Page 123
	302-3	Energy intensity	Environmental indicators › Page 123
	302-4	Reduction of energy consumption	Energy and climate change › Page 101 Environmental indicators › Page 123
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	Energy and climate change › Page 101 Environmental indicators › Page 123
	305-2	Energy indirect (Scope 2) GHG emissions	Energy and climate change › Page 101 Environmental indicators › Page 123
	305-3	Other indirect (Scope 3) GHG emissions	Energy and climate change › Page 101 Environmental indicators › Page 123
	305-4	GHG emissions intensity	Environmental indicators › Page 123
	305-5	Reduction of GHG emissions	Energy and climate change › Page 101 Environmental indicators › Page 123
	305-6	Emissions of ozone-depleting substances (ODS)	Environmental indicators › Page 123
Water			
GRI 3: Material topics 2021	3-3	Management of material topic	Water › Page 108
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	Water › Page 108
	303-3	Water withdrawal	Water › Page 108 Environmental indicators › Page 123
	303-4	Water discharge	Environmental indicators › Page 123
	303-5	Water consumption	Environmental indicators › Page 123
Waste			
GRI 3: Material topics 2021	3-3	Management of material topic	Waste › Page 113
GRI 306: Waste 2020	306-3	Waste generated	Waste › Page 113 Environmental indicators › Page 123
	306-4	Waste diverted from disposal	Environmental indicators › Page 123

Material topics	Disclosure		Reference(s)/URL(s)
	306-5	Waste directed to disposal	Environmental indicators › Page 123
Responsible supply chain			
GRI 3: Material topics 2021	3-3	Management of material topic	Responsible supply chain › Page 128
GRI 204: Procurement practices 2016	204-1	Proportion of spending on local suppliers	Responsible supply chain › Page 128
GRI 308: Supplier Environmental Assessment 2016	308-2	Negative environmental impacts in the supply chain and actions taken	Responsible supply chain › Page 128 Community indicators › Page 143
GRI 414: Supplier Social Assessment 2016	414-2	Negative social impacts in the supply chain and actions taken	Responsible supply chain › Page 128 Community indicators › Page 143
Talent attraction and engagement			
GRI 3: Material topics 2021	3-3	Management of material topic	Talent attraction and engagement › Page 78
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	People indicators › Page 89
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	People indicators › Page 89
	404-3	Percentage of employees receiving regular performance and career development reviews	People indicators › Page 89
Health & safety			
GRI 3: Material topics 2021	3-3	Management of material topic	Health and safety › Page 67
GRI 403: Occupational Health and Safety 2018	403-9	Work-related injuries	Health and safety › Page 67 People indicators › Page 89
	403-10	Work-related ill health	Health and safety › Page 67 People indicators › Page 89
Diversity, equity & inclusion			
GRI 3: Material topics 2021	3-3	Management of material topic	Diversity, equity and inclusion › Page 83
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	Diversity, equity and inclusion › Page 83 People indicators › Page 89
Labor & human rights			
GRI 3: Material topics 2021	3-3	Management of material topic	Labor and human rights › Page 71
GRI 409: Forced or Compulsory Labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Labor and human rights › Page 71 People indicators › Page 89 Responsible supply chain › Page 128 Community indicators › Page 143
Sustainable technology			
GRI 3: Material topics 2021	3-3	Management of material topic	Sustainable technology › Page 55
GRI 417: Marketing and Labeling 2016	417-1	Requirements for product and service information and labeling	Sustainable technology › Page 55 Business indicators › Page 64
Innovation			
GRI 3: Material topics 2021	3-3	Management of material topic	Innovation › Page 50 Innovation & Technology on www.st.com
Customer satisfaction			
GRI 3: Material topics 2021	3-3	Management of material topic	Customer satisfaction › Page 60
Chemicals			
GRI 3: Material topics 2021	3-3	Management of material topic	Chemicals › Page 118
Community and education			
GRI 3: Material topics 2021	3-3	Management of material topic	Community and education › Page 138

SASB index

The Sustainability Accounting Standards Board (SASB) provides industry specific disclosures to help organizations identify risks and opportunities that affect enterprise value. The index below includes ST's disclosures aligned with the Sustainability Accounting Standards Board (SASB) framework, Semiconductors standards.

SASB disclosure indicators – Semiconductors

Code	Topic	Accounting metric	ST 2022 data and/or disclosure location
TC-SC-110a.1	GHG emissions	(1) Gross global Scope 1 emissions and (2) amount of total emissions from perfluorinated compounds	(1) 503,537 Metric tons (2) 419,134 Metric tons CO_2 eq
TC-SC-110a.2	GHG 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	**Energy and climate change › Page 101**
TC-SC-130a.1	Energy management in manufacturing	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	(1) 10,363,957 GJ (2) 91.6% (3) 56.6%
TC-SC-140a.1	Water management	(1) Total water withdrawn, (2) total water consumed, (3) percentage of each in regions with High or Extremely High Baseline Water Stress	(1) 22,507 thousand m^3 (2) 38,638 thousand m^3 (3) 4% of water withdrawn in water stress region
TC-SC-150a.1	Waste management	(1) Amount of hazardous waste from manufacturing, (2) percentage recycled	(1) 24,604 tons of hazardous waste from manufacturing (2) 94.7% of hazardous waste recycled
TC-SC-320a.1	Employee health and safety	Description of efforts to assess, monitor, and reduce exposure of employees to human health hazards	**Health and safety › Page 67** **Chemicals › Page 118**
TC-SC-320a.2	Total amount of monetary losses as a result of legal proceedings associated with employee health and safety violations		As in 2021 and 2022, provisions for estimated probable losses with respect to claims and legal proceedings were not considered material. 2022 Annual Report (Form-20F) on **www.st.com)** (page F-53)
TC-SC-330a.1	Recruiting & managing a global & skilled workforce	Percentage of employees that are (1) foreign nationals and (2) located offshore	We do not believe this metric is relevant to our organization due to the global nature of our business model. We track and disclose human capital metrics including but not limited to, headcount by region, job type and gender, employee engagement, training and development **People indicators › Page 89**.
TC-SC-410a.1	Product lifecycle management	Percentage of products by revenue that contain IEC 62474 declarable substances	We do not track this metric as we do not believe it represents an effective way to evaluate our performance in this area. Information on our approach and the standard we use can be found in **Chemicals › Page 118**.
TC-SC-410a.2	Product lifecycle management	Processor energy efficiency at a system-level for: (1) servers, (2) desktops and (3) laptops	We do not track this information as it is not relevant to our business. We do not manufacture processors for servers, desktops, and laptops. Our approach to product efficiency is available in **Sustainable technology › Page 55** and energy efficiency by product category and lifecycle on **www.st.com**.
TC-SC-440a.1	Materials sourcing	Description of the management of risks associated with the use of critical materials	**Responsible mineral sourcing › Page 134**. Conflict minerals reports on **www.st.com**
TC-SC-520a.1	Intellectual property protection and competitive behavior	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations	As in 2021 and 2022, provisions for estimated probable losses with respect to claims and legal proceedings were not considered material. 2022 Annual Report (Form-20F) on **www.st.com)** (page F-53)

TCFD index

In 2020, we announced our commitment to becoming carbon neutral by 2027. To support this transition, we have aligned our disclosures with the Task Force on Climate related Financial Disclosures (TCFD). The index below provides information and links to ST's disclosures on climate-related risks and opportunities, as recommended by the TCFD.

TCFD			
Disclosure	**TCFD recommended disclosure**	**ST description**	**Disclosure location**
Governance	Disclose the organization's governance around climate-related risks and opportunities.	Our Supervisory Board and Managing Board are respectively responsible for overseeing and directing our sustainability roadmap, considering both risk and opportunity. Our dedicated Sustainability Committee supports and advises the Supervisory Board with sustainability strategy, goals, and performance including climate-related risks and opportunities. Our Executive Committee and Sustainability Council, validate our sustainability strategy and maintain business alignment as well as ensuring the adequate means are in place to deploy the relevant corporate programs, including our carbon neutrality program. Our Corporate Sustainability function is responsible for developing our sustainability strategy and programs. These are then implemented at operational levels by central functions and local sustainability committees who develop a roadmap according to their specificities and needs.	**Governance › Page 24** Supervisory Board on **www.st.com** Sustainability Committee Charter, annex F on **investors.st.com**
Strategy	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	We are proactively addressing the transition to a lower-carbon economy in our corporate strategy. Based on the risk management process described below, we act on the most material risks and opportunities such as climate change mitigation and adaptation, water challenges and positive impact opportunities both in communities where we operate and markets we serve. Simultaneously, we are actively investing in developing and launching new products to help our customers implement new energy-saving and substantial GHG reduction applications.	**Risk management › Page 31** **Sustainability strategy › Page 37** **Sustainable technology › Page 55** **Our approach to the environment (Biodiversity) › Page 98** **Energy and climate change › Page 101** **Water › Page 108** 2022 Annual report (Form 20-F) at **www.st.com** (page 20)
Risk Management	Disclose how the organization identifies, assesses, and manages climate-related risks.	Company-level sustainability risks are addressed by our Enterprise Risk Management program, which is aligned with ISO 31000. We have deployed a process to continuously identify and assess policy, legal, technology, and market transition risks, across the short-, medium- and long-terms. In 2022, a specific science-based study provided by an external party has been fully deployed to main ST and outsourcing sites. This allows us to assess the current climate risks and associated natural hazards which are therefore embedded into our site-level risk assessments. This is complemented by further ad-hoc analyses and studies, in particular at site-level. Our environmental and resilience teams work closely together to address physical risks resulting from climate change that are either chronic (induced by longer-term shifts in climate patterns) or acute (event-driven).	**Risk management › Page 31** **Sustainability strategy › Page 37** **Energy and climate change › Page 101**
Metrics and targets	Disclosure of the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	ST follows the GHG Protocol for managing and reporting its GHG emissions on which we are fully certified ISO 14064. Our roadmap to carbon neutrality by 2027 includes two 2025 specific targets validated by the Science Based Targets initiative and in compliance with the 1.5°C scenario defined at the Paris COP21: 50% reduction of direct and indirect emissions compared to 2018, and the sourcing of 80% renewable energy. As an intermediate product manufacturer, we enable the manufacturing of low-carbon technologies and products that aim at reducing GHG emissions. In 2022, 38% of our revenues derive from products that aim at substantial contribution to climate change mitigation.	**Energy and climate change › Page 101** **Environmental indicators › Page 123** **Sustainable technology › Page 55** **EU Taxonomy › Page 147**

International standards

ST has been a signatory to the United Nations Global Compact (UNGC) since 2000 and a member of the Responsible Business Alliance since 2005. We adhere to the following international guidelines and standards: International Labor Organization; UNGC Principles; UN Guiding Principles on Business and Human Rights; Organization for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises; International Organization for Standardization (ISO); Eco-Management and Audit Scheme (EMAS); IECQ 080000 and Hazardous Substance Process Management.

Alignment of ST sustainability programs with the UNGC 10 principles

United Nations Global Compact 10 principles			ST Sustainability programs
Human rights	**Principle 1**	Businesses should support and respect the protection of internationally proclaimed human rights; and	• Labor and human rights • Responsible supply chain • Community and education
	Principle 2	make sure that they are not complicit in human rights abuses.	• Labor and human rights • Responsible supply chain
Labor	**Principle 3**	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	• Labor and human rights • Responsible supply chain
	Principle 4	the elimination of all forms of forced and compulsory labor;	• Labor and human rights
	Principle 5	the effective abolition of child labor; and	• Labor and human rights
	Principle 6	the elimination of discrimination in respect of employment and occupation.	• Labor and human rights • Talent attraction and engagement • Diversity and inclusion
Environ-ment	**Principle 7**	Businesses should support a precautionary approach to environmental challenges;	• Sustainable technology
	Principle 8	undertake initiatives to promote greater environmental responsibility; and	• Energy and climate change • Water • Waste • Chemicals • Sustainable technology
	Principle 9	encourage the development and diffusion of environmentally friendly technologies.	• Innovation • Sustainable technology
Anti-corruption	**Principle 10**	Businesses should work against corruption in all its forms, including extortion and bribery.	• Ethics and compliance

Alignment of ST Sustainability programs with the ISO 26000 guidelines

ISO 26000: 2010 standards	ST Sustainability programs
6.2 Organizational governance	• Governance
6.3 Human rights	• Labor and human rights • Responsible supply chain • Diversity and inclusion • Community and education
6.4 Labor practices	• Talent attraction and engagement • Health and safety
6.5 The environment	• Energy and climate change • Water • Waste • Chemicals • Sustainable technology • Responsible supply chain
6.6 Fair operating practices	• Ethics and compliance • Responsible supply chain
6.7 Consumer issues	• Customer satisfaction • Sustainable technology
6.8 Community involvement and development	• Community and education • Innovation • Sustainable financial performance

External assurance statement

STMicroelectronics NV – 2023 Sustainability Report – 2022 Performance Independent Assurance Statement

Introduction

DNV Business Assurance France Sarl ('DNV') was commissioned by the Management of STMicroelectronics NV ('ST') to undertake an independent assurance of the Company's 2023 Sustainability Report - 2022 Performance ('Report') including the Global Reporting Initiative (GRI) - Sustainability Reporting Standards.

ST is responsible for the collection, analysis, aggregation and presentation of information contained in the Report. The assurance engagement assumes that the data and information provided in good faith by ST are complete, sufficient and authentic. Our responsibility in performing the work commissioned, in accordance with the terms of reference agreed on with ST, is solely towards ST's Management. This Independent Assurance Statement is intended solely for the information and use of ST's stakeholders and is not intended to be and should not be used by anyone other than these specified parties.

Scope of Assurance

The scope of work agreed on with ST includes the following aspects:

- Analysis, in accordance with *a Moderate* level of Assurance, of data and activities related to sustainability between January and December 2022, as contained in the Report.
- Analysis, in accordance with a *Reasonable* level of Assurance, of the following indicators: "Recordable cases", "CO_2 emissions (scope 1 and 2, and for scope 3 "employee commuting", "business travel" and "goods transportation"), "Percentage of women in management level job grade 15 to 17", "Employee engagement index", between January and December 2022, as contained in the Report.
- Evaluation of GRI Sustainability Reporting Standards principles and requirements.
- Evaluation of specific sustainability performance with regards to indicators defined by the GRI Sustainability Reporting Standards.
- Evaluation of TCFD and SASB information and data.

We understand that the financial data and information reported, are based on data from the 2022 Statutory Annual Report including IFRS Financial Statements, available on ST's website (http://investors.st.com). The review of the following aspects was not part of DNV's external verification exercise: financial data from the Annual Report and Accounts, information and data relating to the ST Foundation.

Verification methodology

Our assurance engagement was conducted in accordance with the DNV protocol for verification 'VeriSustain', which is based on our professional experience and international assurance best practice. These documents require, inter alia, that the assurance team possesses the specific knowledge, skills and professional competencies needed for an assurance engagement regarding sustainability information, and that the team complies with ethical requirements to ensure its independence.

In accordance with the Protocol, available on demand on our website, the Report was evaluated by considering the following criteria:

- Adherence to the principles of GRI Sustainability Reporting Standards.
- ISAE 3000, for the assessment of non-financial information.

Our verification was carried out from 9th December 2022 to 12th April 2023. As part of this engagement, we audited selected sites based on their contribution:

- For the *Moderate* level of Assurance we audited the Corporate Functions, the Back-end manufacturing in Muar (Malaysia), and the Front-end manufacturing in Catania (Italy), and Tours (France). This contribution represented 21,2% of the Group's consolidated environmental data and 21,2% of the Group's consolidated social data.
- For indicators with a *Reasonable* level of Assurance we audited, in addition to the Corporate Functions and the sites mentioned above, the Front-end manufacturing in Ang Mo Kio (Singapore) and Agrate (Italy), and the Back-end manufacturing in Bouskoura (Morocco) and Shenzhen (China). For these indicators, contribution represented 63,1% of the Group's consolidated environmental data and 55,3% of the Group's consolidated social data.

Site audits were conducted on-site for the lead verifier and part-remotely by the second auditor.

We reviewed the sustainability-related statements and claims as part of the verification made in the Report as well as assessing the strength of the underlying data management system, information flows and controls.

We performed sample-based audits of the following:

- Mechanisms for the implementation of its sustainability policies, as described in the Report.
- Processes for determining the materiality of the contents to be included in the Report.
- Processes for generating, gathering and managing the quantitative and qualitative data included in the Report.

We interviewed the Corporate Sustainability Team and more than 50 company representatives (including data owners and decision-makers from various divisions and functions) who were involved in the operational management of matters covered in the 2023 Report. We also interviewed external stakeholders on their relations with the Company.

We evaluated the performance data using the materiality, stakeholder inclusiveness, responsiveness, completeness, accuracy, reliability, neutrality & balance and sustainability context principles, together with ST protocols for how the data is measured, recorded and reported. The performance data within the scope was in the form of Key Performance Indicators.

Conclusions

It is the opinion of DNV that the 2023 ST Sustainability Report is an accurate and impartial representation of the Company's sustainability-related strategies, management systems and performance.
Based on the work undertaken, nothing came to our attention to suggest that the Report does not properly describe ST's adherence to the principles. Considering Key Performance Indicators, nothing came to our attention to suggest that this data has not been properly collated from information reported at operational level, nor that the assumptions used were inappropriate.
DNV believes that the report is in line with the GRI Sustainability Reporting Standards. Further conclusions and observations on the adoption of reporting principles and specified performance information are made below, without affecting our assurance opinion.

Stakeholder Inclusiveness: The stakeholder engagement activities are well structured and shared within the Organization, with concrete commitments at local level with the CSR strategy. Stakeholder interviews undertaken as part of the Assurance process have confirmed the strength of ST's partnership with its stakeholders.

Sustainability Context: The information and data shown in the Report adequately reflect the strategy, the commitments and the activities carried out by ST in relation to the sustainability context within which the Organization operates at global and local level. The four indicators selected for Reasonable Assurance in the 2023 verification are metrics for which eligible employees' performance on sustainability topics is formally valued.

Materiality: The Report includes the major material aspects concerning the Company's performance and stakeholders' concerns and adheres to the principle. The contents of the Report are the result of a consolidated mapping of stakeholders and a structured process for identifying the topics they considered relevant.

Completeness: The Report covers material impacts satisfactorily to enable stakeholders to assess ST's sustainability performance in 2022. The information contained in the report refers to the structure defined in the boundary.

Accuracy: Based on our data analysis and on the business processes that generate them, the data reported in the Report appears to be the result of stable and repeatable activities. The information contained in the Report is therefore accurate and detailed. We confirm a high level of maturity within the different sites, in collecting and elaborating indicators, following well-established procedures and practices to ensure data accuracy.

Balance: The Report is an impartial description of ST's sustainability impacts. The document reflects the Organization's will to represent the activities and results for the reporting year in a way that is balanced and consistent with business strategies.

Clarity: The information presented in the report is understandable, accessible and usable by ST's stakeholders.

Comparability: The information reported enables stakeholders to analyse changes in the organization's current economic, environmental, and social performance against the organization's past performance. ST has adequately adjusted its disclosures to meet the requirements of the updated GRI Standards. We however encourage ST to improve TCFD reporting and enhance disclosures and readability in coming years.

Reliability: ST has developed an effective methodology for collecting information to be used in the Report. The data subjected to our verification was found to be identifiable and traceable.

Timeliness: ST reports regularly once a year making information available in a timely manner, to allow stakeholders to make informed decisions. No restatements were needed for previous disclosures.

DNV's Competence and Independence

DNV is a leading provider of sustainability services, including the verification of sustainability reports. Our environmental and social assurance specialists operate in over 100 countries.
DNV was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement. DNV maintains complete impartiality toward stakeholders interviewed during the verification process.
DNV expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Assurance Statement.

For and on behalf of DNV Business Assurance France, 17th April 2023

Aude Debenest	Marc-Antoine Horenfeld
Lead Verifier	*Reviewer*

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